

# VHF-UHF DIGEST

the official publication of the Worldwide TV-FM DX Association

OCTOBER 1977

## IN THIS ISSUE:

- Convention '77 Wrap-Up
- Tips for the DXer/Builder
- Photos of an Illegal FMer
- 'WCKR' Silenced by FCC
- More Tropo and E-Skip DX!





# From The Staff:



WTFDA Headquarters, P.O. Box 202, Whiting, Indiana 46394

**MEMBERSHIP UPDATE...** Club circulation manager John Zondlo, who also keeps the WTFDA membership rolls, has informed your editor that the total number of WTFDAers last month reached 342. In reaching this figure, we have set a new all-time high for our club--a goal we've sought for many months, and which is illustrated in graph form on the VUD front cover this month. Special thanks on this occasion must go to both John and Mike Hogan, responsible for a recent mass mailing to members of BCB DX clubs which helped to bolster the membership rolls, and to BCBers themselves, who inspected our magazine and publications and felt our club worthy of their membership. Thanks for joining us, and for bringing the number of WTFDAers to a record high!

**CONVENTION '77...** A comprehensive report and photo feature on WTFDA's first Western convention, in Portland, Oregon, begins on page 16 of this issue. Many thanks to hosts Frank Aden Jr., Bill Block, Pat Martin, and Paul and Dave Wardell for a splendid job with what will hopefully be only the first of many Western WTFDA gatherings to come!

**EDITORIAL VACANCIES...** Active and able WTFDAers are needed to fill several openings which will be occurring in our Digest within the next few months. Fred Nordquist (NFM editor) has filed his resignation to be effective no later than December 31. Dave Cox of SFM is also uncertain as to whether he will be able to continue after December. Andy Bolin has resigned from FM STATISTICS, leaving both the FM and TV statistics posts vacant once again. Meanwhile, Doug Everitt (WTV editor) expects to relinquish his column to a successor sometime in mid 1978. Finally, there is the possibility that even your editor-in-chief will not be in his current position come the New Year. If you are able and willing to handle any of these editorial positions, please drop a line immediately to Clarke W. Ingram, 5201 Colewood Drive, Pittsburgh PA 15236, expressing interest. We hope these columns can continue without an undue break in service. You can help!

**NOTES OF NOTE...** CCI editor Frank Aden Jr. has been chosen as chief compiler for the upcoming new edition of the TV STATION GUIDE. Interested members should write to Frank directly...SFM and WTV will both return next month...Dave Janowiak's polarization series has again been delayed. We are still hopeful it can be resumed shortly.

73, *Clarke* for Pete, John, Mike and Morrie

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# MAILBOX

John Zondlo  
c/o PO Box 202  
Whiting IN 46394  
(219) 844-8694  
Deadline: 15th

## New Members:

Dave Bissell  
R.S. Broadhead  
David Legler  
Denis Orlando  
A. Robert Pantazes  
Jari Pitkanen  
Robert Ross  
Carlos Saenz  
Robert Sowinski  
Tracy Wood  
Henry Zikuda

4128 Broughton  
57 Briar Path  
128 E. Magnetic St.  
5034 Sylvia Road  
809 Burk Court  
Kartano 49300  
Box 4373, Station C  
2018 Santa Ursula Ave.  
Route 5, Box 399  
220 S.E. 32nd Ave.  
5239 S. Archer Ave.

Niagara Falls, ON  
Bramalea, ON L6T 2A3  
Marquette, MI 49855  
Drexel Hill, PA 19026  
Ventnor, NJ 08406  
Tavastila, Finland  
London, ON  
Laredo, TX 78040  
St. Clairsville, OH 43950  
Hillsboro, OR 97123  
Chicago, IL 60632

## Renewals:

John Anderson, Alex Berman, Charles Boehnke, Mike Bugaj, Roosevelt Crawford, Albert Ellis, James Filler, Robert Fischer, Glenn Hauser, J.O. Mallinson, Kurt Nelson, Paul Petosky, Peter Sawatzky, Michael Scheel, Randy Schnepf, Richard Segalas, Paul and Dave Wardell, John Wierhasz, Michael Wimer, Steven Wiseblood.

## Rejoin:

Ted Pinski-747 Kipling Drive-Toledo, OH 43612

## Address Changes:

Donald Marshall-801 4th Ave. N, #103-Great Falls, MT 59401  
Timothy Miller-P.O. Box 370-Glen Ellyn, IL 60137  
Kenneth Van Tassell-Riggs Hall Room 2-C.W. Post Center-Greenville, NY 11548  
Robert Walker-2220 W. Highway 52A-Westport, KY 40077

## Renewals Due in November:

B.W. Battin, Artie Bigley, Peter Campbell, Don Erickson, Robert Foxworth, Mark Gregor, Richard Hawkins, Alan Hobson, Roy D. Horsley, John Jefferson, Tom Little, Deane McIntyre, Joe Perge, Dave Pomeroy, Lee Prescott, Marvin Shults, Dennis Smith, Lexington Smith, Thomas Yeazell.

New member DAVID LEGLER writes: "You've got me hooked! After seeing the sample VHF-UHF Digest, as well as your Beyond Shortwave booklet, I would like very much to join your club. What really got me, however, was when, on Thursday, August 4, during the early evening, I picked up WACL-FM Waycross GA, WMAZ-FM Macon GA, WPCB Atlanta GA, and WIVK-FM Knoxville TN. I just recently purchased a Pioneer SX450 stereo receiver and I was amazed that I was receiving the above stations in stereo for a good part of the time that I was receiving them. You may like to know that I am 18 years of age and a member of both the IRCA and the NRC."

Three other clubs claim DENIS ORLANDO as a member: NRC, NNRC, and NASWA. Denis uses a Sony ICF 5900W receiver. He found out about the club from a mailing we sent to IRCA and NRC members.

FM and PSB radio are the DX interests of A. ROBERT PANTAZES. His gear includes a Fisher tuner and Sonar scanners.

From Scandanavia comes JARI PITKANEN, who found out about WTFDA from the World Radio-TV Handbook. Jari does his TV DX with a Luxor Llorisont color TV and a 5 element yagi antenna.

Many other clubs claim ROBERT ROSS as a member. He belongs to IRCA, ARRL, CIDX, LWCA, and the London Amateur Radio Club. DX wise, his gear includes a General Electric TV with rabbit ears and an FM tuner connected to a 10 element yagi. Both Communications World and the FM Atlas provided Robert with info on the club.

ROBERT SOWINSKI says he's interested in many broadcasting bands, but his primary interest is FM. He found out about WTFDA from Communications World. Robert's FM DX gear includes a Pioneer SX737 receiver hooked up to a 10 element yagi with a rotor.

Our Portland convention hosts did a fine job in getting TRACY WOOD to join the club. Tracy also belongs to ASWLC, and uses a Pioneer SX434 receiver for FM and a Zenith Chromacolor TV for TV DX.



Chicagoan HENRY ZIKUDA has plenty of time for DX since he's retired. He DXs with a Grundig receiver and a Realistic DX160. We've got Hank Bennett's book, The Complete SWL Handbook, to thank for getting Henry interested in WTFDA.

#### Tidbits.....

George Sherman is back in the fold, this time with a new address (see the September VUD). George's DX interests include SW, FM, TV, and MW, in that order. He's a member of NRC and NASWA, and for FM uses a Pioneer TX1000 tuner connected to a Winegard SC650 antenna with a rotor.

Magic City member James Filler says his interest is primarily TV: "My interest lies in TV, mainly UHF, because UHF provides more of a challenge, despite the fact that my VHF total is 68, to a UHF total of only 34. My equipment consists of a Zenith b/w model F1335-3, a P-7 (temporarily inoperable), and a UPW26 for UHF, and also a V-180 (also temporarily inoperable) and a 9 element Winegard for VHF. I belong only to WTFDA but thinking of joining IRCA." Magic City, by the way, is a nickname of Muncie, IN.

Some kind words in from new member Mike Mitock: "Let me take this time to say that as a new member, and having just read my first copy of VUD, I am very much impressed! I think my membership in the WTFDA is the best move I've made!!" Glad to have you aboard, Mike!

Our slow scan TV fan, Harvey Woodworth, files this report: "Lodge and fraternal functions have been keeping me quite busy, but I still plan to stay with the all band DX hobby. Although these present commitments will keep me busy for a year, I hope to be into slow scan TV (amateur) within six months, as retirement for me is just 46 months away. AM high fidelity stereo will be here soon, as will be the new generation of  $\frac{1}{2}$  inch home video-cassette recorder/player units, and it will be fun to get on the "ground floor" of this hobby."

New foreign member Bernd Trutenau takes an opportunity to introduce himself: "I'm 18 years old and finished school in June this year. I've been DXing (MW/FM/TV) since several years, seriously since 1975. My receivers are: Siemens RG405 (FM 87-108.5 MHz, MW 518-1620, LW 148-185 kHz, SW 49mb). This is only a table radio, but I had very fine DX catches. TV: Universum SK 2752 b/w portable (European standard). The radio receiver is connected with a rotatable indoor-antenna as well as an all band roof antenna (plus 25m longwire and central heating system for MW and LW). The TV receiver is connected with one VHF antenna (directed toward Holland, west that is) and two UHF antennas (directed toward the north and south). This provides us with 6 programs (5 German and 1 Dutch) - we are located here in the north of the German Federal state Northrhine-Westfalia, very close to the Dutch border. Until now I've had almost all European countries on my screen (on the VHF bands). The whole antenna system also includes several amplifiers. In July this year we had terrific FM DX conditions and they brought the finest catches I've ever had, including Denmark, Great Britain, Sweden, Yugoslavia, Italy (including a lot of Italian private stations, especially on 101-106 MHz), and Spain. The greatest distance was some 800 miles, which is quite unusual here on the European continent (in contrast to North America). Well, besides the WTFDA, I'm also a member of the DSWCI (Denmark), Medium Wave Circle (Great Britain), NRC and IRCA."

For the time being, please send all Mailbox contributions to club HQ in Whiting, rather than to me directly. I, along with many west coast IRCA members, have fallen victim to a prankster who is sending change of address cards to our post offices. The P.O. was given a Cleveland address for me, and other people have wound up in such picturesque spots as Milwaukee, Houston, and Detroit.

That about wraps it up from here. Keep those cards, letters, and phone calls coming in, folks. See y'all in November.....jz

## STATION BREAK

Noncommercial member ads welcome!  
Limit 100 words. Send to Clarke  
Ingram (address on back cover).

FOR SALE: Realistic Pro-3A lo-hi VHF/UHF 3-band receiver. 5 and 15 kHz selectivity. Tape and phone output, instruction manual. \$75 plus shipping. Linda Brodsky, 245-16 149 Ave., Rosedale NY 11422.

WANTED: Cassette airchecks of beautiful music FM's. Will be glad to exchange. Ted Fleischaker, 3023 Tremont Drive, Louisville KY 40205.



# VHF UTILITY DX

Pat Dyer  
5315 Silvertip Drive  
San Antonio, TX 78228  
Deadline: 10th of month

OCTOBER 1977

Hank Holbrook, 7211 Chestnut St., Chevy Chase, MD 20015 QSLed, GMT

4-14: 1745, N6149R 119.7 ov S.Rvr. nr Annapolis, MD (Bly Gey, Ltd.;  
(73) Cessna T20P)  
5-7: 0150, KLM 477 164.075 Wash., DC (Veterans Adm. Hospital; pager;  
(77) 100 watts; antenna at 150 feet)  
8: 1245, N2WL 133.0 ov DC (Warner-Lambert Co.; Lear Jet 240; 2e8s)  
28: 1827, N10255 122.8 vic Easton, MD (Mr. George H. Hughey, Jr.;  
Cessna 150, 1-engine, 2-seat)  
29: 1410, N78T 118.1 nr Gaithersburg, MD (Mr. Gerald J. Tobertello;  
Cessna 310, 2-e, 5-s; 7 watts)  
30: 1238, KSK 209 161.95 Prince Frederick, MD (Marine Op.; 50 w; 410' ASL)  
1824, N8891X 128.7 ov Del. Bay (Ardsley Rental Corp.; Cessna 182;  
1-engine, 4-seat; 7000 feet)  
6-6: 2348, KAH 516 42.06 Carthage, MO (MO Highway Patrol; 300 watts)  
11: 1206, N2070Q 125.3 5 mi se Bal. (BWI) Arpt. (Mr. James F. Walters;  
Cessna 177RG, 1-engine, 4-seat)

Martin J. Theil, 12 Princeton Drive East, Holiday, FL 33589 Bearcat 210  
with indoor rod antenna; Aug 15-Sep 5 period

KRC 646 45.92 Brooksville, FL (ambulance)  
KIB 660 155.13 Hillsboro, FL (police)  
KFG 602 154.175 Tampa (fire)  
KIA 653 154.430 Tampa (fire)

155.160 Clearwater (ambulance) 37.98 Clearwater (Superior Amb.)  
155.220 Hillsboro (ambulance) 155.290 Largo (H&H Ambulance)  
155.295 St. Pete. (ambulance) 155.280 St. Pete. (Owens Ambulance)  
155.340 Clearwater (Comm. amb.) 154.400 Clearwater (fire)

My loggings. Hammarlund SP-600-JX-10 with 30' long-wire at 12 feet (ne-  
sw run); peak F2 MUF noted (bs-backscatter); GMT used

8-19: 2225, 30.30	26: 2045, 30.30	5: 2012, 30.30
21: 2220, 32.96	27: 2005, 30.30	7: 2200, 30.30
22: 2110, 32.96	30: 2040, 30.30	8: 2023, 30.30
35.22 bs	31: 1905, 30.30	9: 2112, 32.96
23: 2230, 35.58 bs	2-1: 2045, 30.30	2130, 35.62 bs
35.28	2: 2100, 30.30	10: 2210, 35.28
24: 2200, 32.96	3: 2308, 30.30	35.62 bs
25: 1920, 32.96	4: 2359, 30.30	

very strong solar noise bursts 2-7: 2232 and 2-9: 1635

32.96 and 35.28 believed to be medical paging systems in Argentina

Solar activity is picking up (as noted by the noise bursts above). The  
flux near mid September was the highest for any Sept since 1974. If such  
levels can be maintained, the fall F2 VHF season may be the best in the  
last few years. (The flares associated with the solar noise bursts above  
did cause blackouts on h.f., i.e., D-region absorption of signals preven-  
ting their reaching the E or F layers).

With this in mind, it is important that members who can monitor for  
US F2 effects (i.e., 33-MHz fire, 35-MHz pagers, etc.) carefully log  
and report the DX they get. Even approximate ID's (states etc.) are  
of some use in calculating MUF's.

73, Pat

WA5ITX



# FM NEWS

Bruce F. Elving, Editor  
18 1/2 East Fifth Street  
Duluth MN 55805 218-727-6916

## New FM Stations Granted

AZ Cottonwood K208AA \*89.5 \$, m [KMCB \*91.5 Phoenix AZ translator]; P; 10 watts  
AZ Tucson (10 miles north of Tucson) K276AL \*103.1 \$, c [KUA1-FM \*90.5 Tucson], UP; 32-12-53; 111-00-21, probably 10 watts.  
CA Sacramento \*99.7 10 City College  
CA Walnut Creek K101-1 101.3 \$, m (10-watt booster station of K101 101.3 San Francisco CA); 1  
CA Weaverville K276AM \$, g [KVIP-FM 98.1 Redding CA translator], 10 watts  
FL Gainesville 100.9 3000 h,v; 300'; initial decision, subject to reversal  
ID Boise 104.3 50000 h,v; 1795' 51, 97; k  
ME Monticello \*89.5 10 Community Bcstg.  
ND Monett 95.9 3000 h,v; 270'; m  
NV Lund (also serving, through a 2-way split, Preston and Ruth NV) K280AQ 103.9 \$, m [KSL-FM 100.3 Salt Lake City UT FM translator station] 10 m; 5 w each lobe.  
NY Cazenovia \*90.9 10 Cazenovia College  
OH Jefferson \*90.9 \$, g 5500 h,v; 372' Agape  
OH New Lexington 106.3 3000 h,v; 300'; kg  
UT Kanab K221AL 92.1 \$, k [KSUB-FM 92.5 Cedar City UT], CBS, 10 watts  
UT Moab K272AL \$, m [KREX-FM 92.3 Grand Junction CO], 10 watts  
UT Panguitch K221AK 92.1 \$, k [KSUB-FM 92.5 Cedar City UT], C, 10 watts  
WA Port Townsend K292AX 106.3 \$, m [KIXI-FM 95.7 Seattle WA]; NBC.  
WY Dubois K296AZ 107.1 [KOLY 97.5 Lander WY] \$, m; C; WY Jeffery City K292AY 106.3 [KRA1-FM 93.7 Craig CO], \$, m, 1 watt  
WY Rawlins K288BG 105.5 (also serving Sinclair and Rural Carbon County WY) [KRA1-FM 93.7 Craig CO]; \$, m, 10 watts  
AT Banff CJAY-FM-1 95.1 1 watt; news format  
NB Saint John CBZ-FM, frequency, power unknown; CBC is the licensee  
ON Hamilton 93.3 50w; McMaster Students  
ON Waterloo 94.5 50w; U. of Wat. %, both quasi-commercial [repeater.  
PO La Molale 92.9 805 watts; CBC-CBV /

## Call Letters

KS Derby 95.9 KDRB  
PO Lac Boyd 95.1 CHLG-FM-3  
PO Deplanter 100.1 CHLG-FM-5  
PO Eastman 105.1 CHLG-FM-4  
PO Petite Opinaca 100.3 CHLG-FM-2 to 54 w  
PO Montreal 107.3 is apparently CITE-FM-2  
PO Sherbrooke 102.7 is CITE-FM-1

## Non-Identifying Stations

AR Little Rock KLAZ 98.5 98-Z  
DE Bethany Beach WATR 95.9 FM-96, r  
FL Miami WATA 97.3 no longer uses WATA non-ID, I am told.  
IL Arlington Heights WMM 92.7 WW-92  
IL Elgin WJXL 94.3 The Fox  
IL Woodstock WNRD 105.5 "The Crossroads"

IA Burlington KGRS 107.3 Rock 107  
IA Des Moines KQMT 97.3 FM-97  
IA Iowa City KICG 100.7 G-100  
KS Topeka WIBW-FM 97.3 Rock-97  
MI Grand Rapids WMLW, "Mellon," FM-101  
MO Jefferson City KJMO 100.7 J-100  
MO Springfield KWTO-FM 98.7 Rock-99  
NJ Atlantic City WNGH 103.7 Rock 104  
NJ Pleasantville WGRF 99.3 FM-99, r  
OH Cincinnati WSAI-FM 94.1 I-94  
OH Lancaster WNOX-FM 95.5 K-95  
OH Westerville WBBY 103.9 Y-104; rj; may go all j  
OR Portland KJIB 99.5 FM-99

## Formats/Networks

AK Anchorage KKLK 103.9 S (AP Audio)  
AR Blytheville KHLK 95.1 k (from m)  
AR Jonesboro KBTM-FM 101.9 r (not m)  
AR Little Rock KXMA 95.7 still all news  
CA Bakersfield KKKX 107.9 rp (from k)  
CA Inglewood KACE 103.9 js and ON THE AIR  
CA Lodi KWIN 97.7 r (from m)  
CA Los Angeles KPOL-FM 93.9 rp  
CA Oxnard KPNJ 104.7 ("K-105"), m  
CA Redondo Beach KKOP 93.5 m  
CA Santa Ana KYMS 106.3 rg (from p)  
CA Santa Barbara KTMS-FM 97.5 rp  
CA Truckee KEZC 101.7 mk (from r) [94"  
CO Colorado Springs KPIK-FM 93.9 rk, "K-"  
CO Craig KRAI-FM 93.7 m  
CO Lakewood KPPL, "K-People" 107.5 m  
CO Sterling KSTC-FM 96.7 r (not m); mono  
CT Storrs WHUS \*91.7 or ic until 11 a. m.;  
CT West Haven WHHU \*88.7 p ["J-FM"  
CT Westport WJUF 107.9 rj, "108-FM," or /  
IL Chicago WHEI 95.5 no S  
IL East Moline WENO 101.3 m  
IL Elwood Park-Chicago WXFH 105.9 pc, also s; "Triad" non-ID used during rock times.  
IL Moline WHTT 96.9 A; returning to A after a hiatus, presumably dropping S  
IL Peoria WNET 105.7 pr (not m); non-ID: "The Album Station."  
IL Park Ridge WYTH \*88.5 r  
IL Rock Island WHBF-FM 98.9 C (WHBF-FM, WHTT and WENO have transmitters in Orion IL).  
IA Carroll KCIM-FM 93.7 rp (from m)  
IA Davenport KTIK 103.7 m, has some NBC newscasts, but not all of them; ditto for CBS on WHBF-FM.  
KY Manchester WML-FM 103.1 m  
ME Caribou WFST-FM 97.7 kr

Seemingly on 24 hours a day:

**KOPN radio 88.5 MHz**  
**915 E. Broadway**  
**Columbia, Mo 65201**

ME Boulton WHOU-FM 100.1 r (not rk)  
ME Presque Isle WHOP 96.9 m (none p)  
MA Boston WBUR \*90.9 only j (no c)  
WCOZ 94.5 pr  
WTK 100.7 heard as rp, but still mis-identifying as TK-101; it is apparently dropping k  
MA West Yarmouth WOCB-FM 94.9 m (r in evenings)  
MT Allendale WSRX, jp; \$  
MN Albert Lea KCPI 95.3 r (not m)  
MN Mankato KEF 99.1 E  
MN Winona KQAL \*88.5 r (from rc); still \$  
MO St. Louis KMOX-FM 103.3 m  
NJ Atlantic City WBYV 95.1 m

ALL MUSIC ALL THE TIME.

# WAYV

**FM 95** No, not Schuik!

NJ Bridgeton WSNJ-FM 107.7 m (not pk)  
NM Albuquerque KRKE-FM 94.1 pr; still on low tower  
NY De Puy WBLK 93.7 B (from S)  
NY Riverhead WRCH-FM 103.9 pr  
OH Columbus WVKO-FM 94.7 m  
WNNI-FM 99.7 m  
OH Sylvania WKEZ 105.5 r (from m); Z-105  
PA Allentown WXNN 104.1 k (from m); gives frequent, full ID's.



PA Braddock WTFM 96.9 m; uses above logo.  
TX Corsicana KXCL 107.9 U (not Y)  
TX Hillsboro KHBR-FM 102.5 k (from m)  
TX Wichita Falls KNTD 103.3 r (from m)  
MEXICO Tijuana XHNM 92.5 has English rs at night; Spanish, L. days  
Tijuana XHOF 98.9 no English

## Facilities' Changes

AL Huntsville WAHR 99.1 10000 h,v; 540'  
AZ Nogales 98.3 (new) 230 h,v (225')  
CA Pacific Grove KOCN 104.9 950 h,v (550')

FL Boynton Beach WHRS \*90.7 33500 h.v. (195')  
apparently deleting directional antenna.  
GA Dublin WQZY 95.9 220' (3000 h.v.)  
IL Waukegan WUFA 102.3 adds v, 190' (3000)  
IA Fort Dodge KKEZ 94.5 50000 h.v.; 600'  
KS Garden City KBBW-FM 97.3 adds v  
MA Lynn 101.7 adds v, 175' (3000) [370']  
MI Battle Creek WKCF-FM 103.3 27000h.v.;  
MI Zeeland WZND 99.3 94' (3000 h.); 8, gk  
MN Rochester KRCH 101.7 710 h.v. (560')  
NE Omaha KEZO 92.3 85000 h.v. (1210')  
NC Asheville WLOS-FM 99.9 46000 h.v. (2670')  
for maximum Class C coverage: 57, 107 mi.  
ND Minot KCLB-FM 97.1 65000 h. only; 840'  
OH Cleveland WUHS 100.7 7700 h.v.; 1060'  
WQAL 104.1 7000 h.v.; 1100',

both of above reduce coverages somewhat.  
OH Hillsboro WSRW-FM 106.7 50000 h.v. (160')  
PA Waynesboro WAND-FM 113.1 550 h.v.; 620'  
TN Nashville WNAZ \*88.9 500 h.v.; 120'  
TX El Paso XUEO 95.5 88000 h.v.; 1390'  
TX Plainview KPLA 97.3 100000 h.v.; 440'  
UT Orem KORM 107.1 -920' (3000 h.v.) [1200']  
WA Seattle KRAB \*107.7 63000 h., 27000v.; /  
WI Milwaukee WYMS \*68.9 1500 h. (870')  
WI Milwaukee WZLH-FM 95.7 34000 h.v.; 610'  
SA Regina CFMQ 92.1 100000; new, un-  
announced antenna height.

### Deletions

CA Bishop KZTAD 92.1  
MA Hilsbury WVOI 92.7 or 95.3 (it finally  
happened; station was long silent)  
OH Ironton W237AB 95.3  
PA Media 100.3; back in application status,  
along with two other Media 100.3 app's.

### On Air and DX Ready (presumed)

AL Greenville WKKX 95.9 3000 h.v.; 270'  
AR Lake Village KLYA 95.9 3000 h.v.; 300'; g  
CA Ridgecrest KZIO-FM 92.7 km 3000 h.v.;  
-120' (transistor in Ridgecrest-China Lake  
on 92.7 requests move to 99.3)  
FL Tallahassee WOND 103.1 3000 h.v.; 300'  
GA Camilla WGBI 105.5 3000 h.v.; 300'  
ID Sun Valley KSKI-FM 93.5 51 h.v.; 2145'  
IN Rockville WAXI 104.9 1200 h.v.; 440' [10 m  
IA Decorah KLCD \*89.5 8, c (MN Public R.), /  
KS Hiawatha KNZA 103.9 3000 h.v.; 300'  
KS Oberlin KBNF 101.1 100000 h.v.; 420'  
MA Worcester WCHC \*89.1 10 m  
MS Gulfport WGUE-FM 96.7 3000 h.v.; 260'  
MO Montgomery City KVEN 103.9 3000 h.v.;  
241', 8, rm. U [295']  
MO Mountain Grove KLRS-FM 92.7 2400 (h.); /  
MO Tarkio KTRX 93.5 3000 h.v.; 235'  
MT Billings KBMS 98.5 25500 h.v.; 400'; 8, k,  
l and SCA. NJ Lawrence Township WLCR \*89.7  
10 m. NC New Bern WREK 101.5 100000 h.v.;  
580', 8, m. OK Weatherford KWEY-FM 97.3  
64000 h.v.; 400'; 8. OR Albany MKRI-FM  
99.9 100000 h., 50000 v.; 1075', 8, k  
TN Saddy Daisy WZDQ 102.3 3000 h.v.; 286'  
TX Ballinger KCMB 103.1 3000 h.v.; 300'; 8,  
m, has "Continental News."  
TX Marshall KMHF-FM 103.9 3000 h.v.; 300'  
TX Port Lavaca KBUL 95.9 8, km (Calis, too),  
3000 h.v.; 175'  
UT Logan KELW-FM 92.9 29500 h.v.; -720'  
VT Windsor "WVPA"-FM Power, ht., frequency  
not known! [8, g  
WA Wenatchee KIAM-FM 104.5 105 h.v.; 1330'

WA Walla Walla KSKT 97.1 50000 h.v.;  
1340'; 8 (height changed from that  
which was originally announced)  
WA Yakima KYBU 98.3 700 h.v.; 560'  
WY Gillette KOLL-FM 93.5 3000 h.v.;  
272', r  
VI St. Thomas WUJ \*86.9 10

### On Air with Changes (selected)

AL Florence WQLT 107.3 100000 h.v.; 700'  
FL Leesburg WHLY 106.7 100000 h.v.; 800',  
gs; GA Savannah WTOG-FM 94.1 89000 h.v.;  
1320'. IL Kankakee WBYG 99.9 10000 h.v.;  
230'. IN Elkhart WYEZ 104.7 50000 h.v.;  
500'. KS Dodge City KGNU-FM 95.5  
100000 h.v.; 430'.  
MN Park Rapids KPRM-FM moves from 103.7  
to 97.5, 100000 h.v.; 413'  
NE Bath WISY 105.9 50000 h.v.; 500'  
NJ E. Orange WFMU \*91.1 1450 h.v.; 360'  
NY New York WYNY 97.1 4600 h.v.; 1300'  
WCBS-FM 101.1 4600 h.v.; 1300'  
NC Burgaw WPJC 99.9 100000 h.v.; 520'  
ND Fargo KFMM-FM 97.9 100000 h.v.; 350'  
OK Oklahoma City KZUE 102.7 98000h.v.; 900'  
OR Lake Oswego KMLK 106.7 94000h.v.; 880'  
PA Philadelphia WCAU-FM 98.1 12500 h.v.  
SC Darlington WDAF-FM 105.5 3000 h.v.;  
260', k  
VA Exmore WEXM 107.5 50000 h.v. (260')  
WI Shawano WTCM-FM finally moves from  
100.1 to 99.1 (3000 h., 180')

### New Transmitters—Stereo?

KS Winfield KSWC \*88.3 WY Brookville  
MO Columbia KTGC 96.7 WCMP \*88.1  
NE Lincoln KUCV \*99.3 - WY Fort Gay  
NC Whiteville WENC-FM 99.1 WFGH \*89.9  
SD Madison KJAN-FM 103.1

### 67 kHz (SCA) Activities

AL Albertville WQSB 105.1 adds SCA  
AK Fairbanks KUAC \*104.7 adds SCA  
CT Hartford WVIC-FM 96.5 Q  
WORE-FM 102.9 no SCA heard  
IL Mt. Carmel WUJC \*89.1 adds SCA  
IL Waukegan WUFA-FM 94.1 no SCA heard  
IN Valparaiso WUJE 105.5 adds SCA  
KY Hazard WSGS 101.1 no SCA heard, only  
strange garblings at times  
MI Muskegon Heights WKJR-FM 101.7 no  
SCA; used only for telemetry  
NY Albany WABC \*90.3 no SCA heard  
NY New York WKCR \*89.9 adds talking book  
WFOV \*90.7 talking book  
NY Syracuse WNTQ 93.1 Muzak; identical  
to Muzak on WHHR 102.9 Syracuse.  
NY Watertown WNCQ 97.5 music (not Muzak)  
NC Davidson WDAV \*89.9 adds SCA  
OH Cincinnati WGUC \*90.9 no SCA heard  
WBOE \*90.3 adds talking  
book; identical to WZZP, WKSU's SCAs.  
OH Hamilton WHSS \*89.5 adds SCA; but  
what would a 10-watter be doing with an  
SCA?  
OH Wooster WNST-FM 106.5 no SCA; weather  
reporting system alluded to last month  
is carried only on their main channel.

### WWST AM 5 FM Stereo

960 3 104.5

P. O. Box 384

Wooster, Ohio 44691

PA State College \*89.9 (new) adds SCA  
UT Salt Lake City KJHD-FM 93.3 music (pr  
on main channel)  
VA Front Royal WIXV 95.3 adds SCA  
WV New Martinsville WBSI 103.9 adds SCA  
WV St. Albans WABC-FM 105.1 adds SCA  
WI Ladysmith WMB 103.7 teleprinter noise  
ON Burlington CING 107.9 adds talking book

### Stereo, or to be Stereo?

AR Arkadelphia WDL 100.9, r  
CO Steamboat Springs KRCB-FM 96.7, m  
IL Ottawa WRXA 95.3  
IA Clinton KCLN-FM 97.7 r (not rm)  
IA Pella KPLL 103.3 m, A  
SD Rapid City KGGG 100.3 k, Y  
WA Walla Walla KEXI 93.3 m  
MEXICO, Tijuana BCN XHFG 107.3

Abbreviations: c classical, e ethnic, g  
gospel, j jazz, k country, L Latin, m is  
middle of the road, p progressive rock, r  
rock oldies and top hits, s soul, A ABC-FM,  
B National Black Network, C CBS, E ABC  
Entertainment, I ABC Information, M Mutual,  
N NBC, P National Public Radio, S Associ-  
ated Press Audio, U United Press Audio, Y  
ABC Contemporary, Z Mutual Black Network;  
Q Physician's Radio Network (on SCA).

### FM Stations of Brazil R=Radio.

88.1 R. Gazeta, Sao Paulo 5 km  
89.3 R. Manchete, Rio de Janeiro, CP  
89.7 R. Record, Sao Paulo, CP for 50 km  
89.9 R. Cultura " " (at 200 kHz spacing)  
90.1 R. Brasil Central, Goiania, Goias  
90.5 R. Excelsior, Sao Paulo  
90.7 R. Jornal, Belo Horizonte, 10 km  
91.3 R. Difusora, Sao Paulo  
91.7 R. Educadora, Campinas, Sao Paulo  
91.7 R. Triunfo, Porto Alegre, 1 km  
91.9 R. Cultura; Apucarana, Parana  
92.1 R. Imprensa, Brasilia; CP for 10 km  
92.3 R. Universo, Curitiba, Parana; 5 km  
92.5 R. Globo 8; Rio de Janeiro  
92.7 R. Transamerica, Recife; 20 km  
92.7 R. Jornal Integracao, Doca SP; CP  
92.9 R. Eldorado, Sao Paulo  
93.1 R. Cultura; Botucatu, Sao Paulo; CP  
93.5 R. 31 de Marco; Aracaju, Sergipe; CP  
93.9 R. Verdes Mares, Fortaleza, Ceara  
94.1 R. Roquete Pinto, Rio de Janeiro  
94.3 R. Centro; Campo Grande; CP  
94.5 R. Princesa do Sul; Pelotas; CP  
94.5 R. America, Sao Paulo  
94.9 R. Difosora, Porto Alegre; 5 km, CP  
95.3 R. Globo Capital; Brasilia; 10 km, CP  
95.7 R. O'el Rei, Rio de Janeiro, CP  
95.7 R. Itatiaia, Belo Horizonte  
95.9 R. Porvir; Aracaju, Sergipe CP  
96.1 R. Sul, Barra Mansa, Rio de Jan. CP  
96.5 R. Tupi, Rio de Janeiro, 3 km  
98.1 R. Eldo Pop; Rio de Janeiro  
98.5 R. Cultura; Caxias do Sul, CP  
98.7 R. Colombo, Curitiba, Parana; 1 km  
98.9 R. MEC, Rio de Janeiro  
99.3 R. Tropical, Manaus  
99.5 R. Municipal; Pocos de Caldas, CP  
99.7 Radio JB, Rio de Janeiro  
100.1 R. America, Salvador, Bahia  
100.1 R. Universidade; Porto Alegre  
100.5 R. Nacional, Rio de Janeiro



100.9 R. Pan America, San Paulo, 90 kw. 101.5 R. Transamérica, Rio de Janeiro, CP. 102.1 R. Japenol, Rio de Janeiro. 103.1 R. Cultura de Bahia, Salvador, Bahia. 103.1 R. Floresta Negra, Joinville, Santa Catarina, CP. 106.1 Emiss de Educ Rural, Caico, Rio Grande do Norte. 106.1 R. Nacional, Brasília, 1 kw. 106.3 Emiss Rural, Petrolina, Pernambuco, 5 kw. 107.7 R. Assuncao Cearense, Fortaleza, Ceara. 107.9 Iniss. Continental, Recife. The preceding Brazilian list from Luiz Roberto de Medeiros, president, DX Club do Brasil, via Mike Dörner. The preceding is not a complete list; CP means "construction permit." No calls? Where have all the P's gone? Now, on to members' and EM Atlas readers' reports:

**Dual-city id's:** PA York WSBA-FM 103.3 adds Lancaster PA. TX Sinton KOUL 103.3 FCC sets aside grant to Sinton-Corpus Christi; also denied continued use of Sinton-Portland TX i.d.

After being notified by WTFDAer Dick Clark HIBI San Francisco DR moved from 101.9 to 102.3 where they belong. Other DR doings: HIRJ 107.7 is on with 100 w in La Romana (100 w). 97.7 HIME with 120 watts in La Romana, "Radio Guia." Dick stopped in and talked with the owner; he is the far-these one who picked up his station. It is FM only, and HIME is not interested in AM whatsoever!

On air and DX ready is WAZY-FM on 96.5, having moved from 96.7 (Lafayette IN). Transmitter is 18 miles SW of Lafayette near Attica IN; operating on reduced power (probably 5 kw) pending FCC approval for the change; and by the time you read this they'll probably be on with their full 50 kw. Tom Cornell called WAZY-FM to find out this information after hearing them on 96.5, and seeing them—yes seeing them on the digital display of an FM car radio that Delco produces!

KSCF 97.1 Florissant MO is aiming for "early January" as its target date, says Rich Eddie. It took 8 1/2 years to get on; studios will be at Lafayette and Dunn Road in Florissant with remote studio at Noah's Ark Motor Inn, St. Charles MO; transmitter in Grafton IL. Will be mor, but not wall-to-wall. Quitting SCA? No SCA heard recently on WNAF 93.1 Indianapolis (and WWKI 100.5 Kokomo IN). Also, says Ted Fleischaker, WEKU Richmond KY continues 10 watts, and not heard in nearby Lexington.

San Francisco FMa have problems because of terrain, says David Grim, who traveled and sent much FM news this month. "Stereo in the car is almost ruined in many areas on most stations due to blockage/reflections. Oddly enough, KFOG which is one of the lower-power stations had one of the more stable signals. Same with KYA-FM. WTOF Canton and WCLV Cleveland have both dropped their SCAs. "Apparently the Greek programming that was on them has been discontinued." He asks if anyone knows what kind of r KNBQ 97.3 Tacoma WA has?

Glenn Hauser says in pushing SCA. I am espousing a "something for nothing" philosophy; that there is a trade-off. Main-channel coverage is reduced when a station adds SCA, and in mountainous areas like east Tennessee SCA is not practicable. Yet, I charge that SCA must be fairly tested, and that even in TN and in San Francisco it should work, even in a car. Using WUOT 91.9 Knoxville as an example with 100 kw k & v at 590', I find with 100 kw and no SCA they get out 38 miles primary and 82 miles secondary. If they added an SCA and reduced modulation to a maximum of 90%, they would still wind up with a main carrier of 90 kw effectively and coverages of 37 and 81 miles. For such a slight (theoretical) reduction they gain a radio station (SCA) with 10,000 watts ERP and having coverages of 25 miles primary and 62 miles secondary. And SCA's static-suppressing qualities are infinitely better than AM within the primary coverage area of an SCA transmitter (or more properly a main-channel transmitter having an SCA), and its fidelity better, too, than virtually any AM station! And now Clarke Ingram updates the "WCKR" story:

At 8:29 pm Tuesday, Aug. 15, "WCKR-FM" 98.7 Carrick PA and its AM adjunct on 1200 kHz were caught and silenced by the FCC, who had no help from me. I was listening to "WCKR" when it happened, and in fact joked that the FCC had probably picked them up, after the station had gone dead. Calling the station to find out the difficulty, I was told that the FCC mobile unit was indeed at the door. The operator, whose first name is Bill, was not present at the time; it must have been quite a shock for him to return and find "WCKR" had been shut down. I'm told that he didn't have to forfeit his First Class license, which is fortunate; apparently he received only a reprimand from the FCC field engineer for the unfiltered AM harmonics in the SW band (did you hear them, Glenn Hauser?) which seem to have been the downfall of "WCKR." I do not expect them to return to the air. Meanwhile, "WBQ" 88.7 Midland PA was heard and taped again on Aug. 14 with a surprisingly near-perfect signal, the owner being inspired to sign 89Q on for a few hours of rock music after I'd called to report good reception of his equipment test around 9 pm. This may well have been the last night on the air for "WBQ"; its owner, after learning from me what happened to his friends at "WCKR," states that 89Q will not return either. Says he: "I have a First Class license, a ham license, and a CB license, and I don't want to lose them all." So ends the only "local" radio service to Pittsburgh's South Hills, illegal or otherwise, since my own "KKN-AM-FM" (actually legal at 100 milliwatts) closed in 1974 to move to a nearby high school, where we were stymied in our plans for 10w on "88.7." There is talk that one of the "WCKR" folk may start another illegal FM locally, and 89Q's owner mentions a proposed "WALE" 90.1 Canonsburg PA, but these may never exist. It seems ironic that the FCC would promote localism in radio-TV and yet adopt regulations prohibiting such stations as well as "WCKR," forcing the Carrick fellows to operate "extra-legally" and thus be silenced. . . The absence of a station to which I've listened to constantly for more than a month may be enough to prompt me (and other "WCKR" listeners) to petition the FCC for less restrictive rules permitting such strictly local outlets. The loss of "WCKR" is mourned here. I will do everything within my power to legally revive it. [How about putting "WCKR" on cable, or on SCA?]

The CRTC, in licensing so many new CBC FM transmitters, has a job on its hands, as a letter to Fred McCormack from the Winnipeg office of the CBC says Brandon and Baldy Mountain transmitters are only "two of over 650 transmitters being planned for installations over the next several years as part of the CBC's program to extend the national service to all unserved or inadequately served communities in Canada and the north—a program which has justifiably been called the greatest engineering feat of its kind in the world. . . Because there are not enough suitable AM frequencies available, the CBC is using FM frequencies in order to extend the AM national program service." Why, I ask, do they embrace FM only as seemingly a last resort, and not capitalize in their letters and promotion on FM's high fidelity and static-free qualities, and why is the national program service called an "AM"?



(rather than a "radio") service?

Rick Samford, Burnet TX, noticed a Mexican station on 107.7 during a recent tropo opening to northern Mexico (Monterey, etc.). "No Mexican stations are listed on this frequency, and there are no Texas border stations on this frequency. Monterey was quite strong, and the antenna bearing was about the same. The station played English-language rock." If anyone has knowledge of such a station, please write in and let us all know. Rick is within 200 miles of the Rio Grande, and has the potential to tune in Mexican FM whenever tropo is up. Also contributing: L. Weil, North Babylon NY; Ron Wing, Wichita KS; Roger G. Winsor, Hobart IN. (List continued from lower on this page.)

Andy Smith says Pacifica's WFPW \*89.3 Washington DC is in danger of going off the air. "I would not care if it did. The staff is about 75% black and they seem to have their ideas of what 'black music' is. They say that they are trying to bring about racial harmony; but their policies do everything to discourage it. It would not hurt to give this license to someone else, like the University of Maryland, who would like it. Pacifica fought five years to get the license. Now it appears to be losing it through faulty operations which disgust and discourage listeners and contributors. I contribute to WGTB and WAMU, but am frustrated by WFPW. Richard Steinberger sent an article from the May, 1977 Audio showing prototype McIntosh equipment being demonstrated in the home of Harold Colt, who lives near the WTIC-FM 96.5 Hartford CT transmitter, and tries to listen to WQXR-FM 96.3 New York.

Ken Van Tassell is in college this year and plans to work at WCWP \*88.1 Brookville NY. "It's probably in the top 10 college stations in the country. We are planning to go stereo sometime around December or January!" Larry Weil, who DXes SCA with a Karkota adapter, says in the July article, both input and output stages are emitter followers, which match impedance (high in, low out) but do not provide voltage gain. WFUV 90.7 New York supposedly runs talking book SCA only 10 to 10:30 pm on Mondays, Tuesdays, Thursdays and Fridays, while WKCR 89.9's will be on noon to 8 pm, including Saturdays and Sundays. In-Touch Networks will offer this service.

And Clarke Ingram is not the only WTFDAer with news of illegal stations. Ron Wing saw my column in which I speculated that the extralegal Leadville CO translators are deleted. Not so! He was in Leadville Aug. 8 and they were on, sometimes sending out stations in addition to the intended ones. Here they are. "K299" 107.7 carries KVOD 99.5 Denver, KUAD 99.1 Windsor, KVMN 98.9 Pueblo, and KIMN 98.5 Denver, in frequencies descending from 107.7. Similarly "K292" 106.3 has KAVI 95.9 Rocky Ford, KKKX 95.7 Denver, KRDO 95.1 Colorado Springs. He also heard some stations, such as KQIX 93.1 Grand Junction on about 106 MHz, and wonders if that one was cable radiation? Now, I ask, should I or any of you notify the FCC and have these illegal "stations" shut down? Or is the Leadville situation a wonderful new way to spread FM programming around the continent?

Roger Winsor was on a trip to New England, and notes stations there seem to give their call letters a lot in the morning, but at night, forget it. Both New Bedford stations, WMYS 98.1 and WJFD 97.3, were having troubles, WJFD off almost all the time; only heard once with the usual Portuguese programming. WGBH \*89.7 Boston had by far the best Boston signal; "I guess you can't beat that 100 kw!" WDSO \*89.1 back on the air with similar programming, hum like last year [Chesterton IN]. "I can't believe WAUS Berrien Springs MI is switching from 90.9 to 90.7 with WHAD so close, but at least I'll be able to hear WDH5 or whatever it is sharing time in Glen Ellyn IL. Hi."

The Canadian Radio-Television and Telecommunications (CRTC) Commission came up with an unusual and almost prophetic argument in approving a talking book for CING Burlington ON on SCA. "The library plans to supply print handicapped people in the area with fixed frequency SCMO receivers in order that they may receive the proposed programming. The Commission is concerned that if for any reason the current three-year agreement between the library and the licensee is not renewed, and the library enters into a similar agreement with another FM station in the area, the entire stock of SCMO receivers supplied to its listeners would have to be either replaced or substantially modified. In order to promote the use of SCMO channels for broadcasting to the general public, and in order to help maintain continuity of valuable services such as the one proposed, the Commission would prefer to see the development and distribution of variable frequency SCMO receivers. The Commission therefore recommends the use of this latter type of receiver." Amen! Contributors: R. J. Steinberger, Hudson MA; Phil Ihonae, Port Lavaca TX; K. Van Tassell, Greenvale NY; D. Walcutt, Carbon IL.

In other news, the FCC is allowing KRNB \*-FM\* \*90.1, a 10-watt Indian Reservation station at Neah Bay WA to broadcast classified ads at no charge to persons. The FCC approved the program, stating that Neah Bay is an isolated community with a population of 663. FCC says "no" to KFMP 102.9 Cape Girardeau MO seeking to change from a Class B to a Class C station, charging it is the only Class B station in Zone II; but the FCC said Malden MO would lose its Class A assignment (92.7) if Class C status were given KFMP. And the FCC approved new owners for WLCB-FM 106.3 Hodgenville KY, to the same ownership as WIEL (AM) Elizabethtown, with most programming to shift to Elizabethtown. A WIEL competitor, WQXE (AM) filed a petition to deny this transfer, but was overruled by the FCC. Contributors: Phil Boersma, Spring Lake MI; R. Clark, La Vega DR; Tom Cornell, Greentown IN; Dwight Crabtree, Lafayette NY; F.S. Dombrowski, Jr., Milwaukee WI; Mike Dorner, Jr., Metairie LA; R. Eddie, St. Louis MO; A.H. Ellis, Brantford, Ont.; Ted Fleischaker, Louisville KY; D. Grim, Akron OH; Harry J. Hayes, Gouldsboro PA; G. Heubel, Little Ferry NJ; G. Hauser, Knoxville TN; C. Ingram, Pittsburgh PA; F. McCormack, Fargo ND; Rod O'Connor, SW Harbor ME; Jim Pizzi, Orcutt CA; John Robertson, Croswell MI; Allen Rockford, Syracuse NY; R. Samford, Burnet TX; M. Scheel, Davenport IA; A. Smith, Hyattsville MD, etc.

# NORTHERN FM-DX



Dr. Nordquist  
7945 Boxford Road  
Clay, NY 13041

October 1977

Deadline: the 10th

For FM DXers in Canada, the Northwest-Central states of WA OR ID WY ND SD NE MN IA, and all states east of the Mississippi River and north of the Mason-Dixon Line. Report your DX now.

The bottom dropped out of the Es activity after 8/3, with no openings noted by reporters since then. This year's Perseids meteor showers on/about 8/12 were very active, with many bursts noted on FM. Some tropo was noted, however nothing was spectacular about them. Keep on the lookout for those few excellent general coverage tropo openings that occur in Oct/Nov. Now to the reports:

Harry J. Hayes - Star Route - Box 226c - Gouldsboro, PA 18424 (EDT)

Eqt: Zenith Trans Oceanic w/whip.

7/31

Es 1642 Unid 101.5 CL sounded like WIX2  
1742 KOGO 94.9 IA Des Moines  
1825 KJCK 94.5 KS Junction City  
1901 KGNW 95.5 KS Dodge City, L&C for 4hr  
1700 Es peaked into Ch. 7 briefly.

8/3

Es Very intense at 1725. Some channels 2 or 3 deep at 1925.  
1725 KBEQ 104.3 MO Kansas City, ID  
1725 KTPK 106.9 KS Topeka, "FM-107", lcl wx  
1742 KRNK 98.9 NE Kearney, ID  
1745 KQMR 100.3 AR Jacksonville  
1756 KVEN 95.5 OK Tulsa, "Queen"  
1759 KTEH 93.3 OK Ada, rock, ID-Ada/Atoka

8/3

Es 1800 KSRD 96.9 NE Seward  
1800 KMRJ 96.9 KS Pittsburg, o/KSRD, CBS NX  
1806 KSOZ 91.7 MO Pt. Lookout, News, ID  
1820 KRAV 96.5 OK Tulsa, Tulsa lcl ad.  
1831 KOTY 99.3 KS El Dorado, ID  
1841 KOFM 104.1 OK Oklahoma City  
1858 KNOI 103.9 IL Flora, "In Flora" heard  
1900 KCHI 103.9 MO Chillicothe, many IDs  
1915 KJSM 101.1 NE Columbus, "Nice place to  
1921 KMGK 93.3 IA Des Moines /be"

8/12 MS

MS 0200 KQKQ 98.5 IA Council Bluffs, "It's 1 o'clock, this is KQKQ-FM" 15 sec. burst, album oriented. (1020) logged w/Zenith on Log Periodic antenna.

August turned out to be a lousy month for tropo here. The bursts on the morning of 8/12 were something else.. Not too many reports after this, as it's getting to be BCE time again.

Michael L. Hogan - 9224 Cottage Grove Avenue - Highland, IN 46322 (Phone: 219-924-2361)

Eqt: Panasonic RF-877 receiver, single CM Probe 9 (Model 4408) antenna mounted horiz. at 17' hand rotated. 75 ohm coax with matching baluns. The lack of time has reduced the no. of new loggings for this reporting period. 152 new stations have been added to the log this year bringing the totals to the following: Hrd: 223; 88-92: 41; Es 15; 10w 51 MS 0 CN 1; USA 16; TPU 17. Stations verified on tape 148. All stations new to log:

8/8

Qw 0500 WGMZ 107.9 MI Flint, nx. ads, ID

8/10

Tr 2200 KQCR 102.9 IA Cedar Rapids, "Q-103"

8/11

Tr 1959 WJIM 97.5 MI Lansing, NBC nx  
2230 WIFF 105.5 IN Auburn, 700 club

8/12

Tr 0800 WDFP 95.3 MI Battle Creek, ID  
1005 WELB 107.3 MI Greenville, ID

8/13

Tr 1011 WXUS 92.7 IN Lafayette, o/lcl WMM

9/5

Tr 0600 WKKK 100.9 IL Pana, capsule rx - 73's Tr 1733 WRTL 95.3 IL Rantoul, =

8/15

Tr 0745 WZZR 95.7 MI Grand Rapids, "new 2-96"  
0747 WCHA 95.7 IL Effingham, Berts TV/ant. service ad (A good ad for TV DXers, hi!)

8/25

Tr 0913 WJVM 94.3 IL Sterling, ID  
1059 WPNE 89.3 WI Green Bay, NPR

8/30

Tr 1100 WYMS 88.9 WI Milwaukee, ID, nx  
1135 WIBI 91.1 IL Carlinville, ID

9/1

Tr 1053 WVJC 89.1 IL Mt. Carmel, ID

9/2

Tr 1733 WRTL 95.3 IL Rantoul, =

Mark & Scott Levitt - 3132 Woodland Ave - S. Plainfield, NJ 07080

Eqt: Panasonic portable AM/FM with rabbit ears Log totals: Mark's 110, Scott's 84

8/21

Tr 2215 WBOC 104.7 MD Ocean City (160)  
Qw 2230 WRFX 102.5 PA Reading (87)  
2245 WQVR 101.1 PA Philadelphia

8/26

Tr 2330 WMAL 107.3 DC Washington (180)  
2345 WSLT 106.3 NJ Ocean City (100)  
2350 WRTK 105.7 MD Catonsville (144)

8/27

Tr 0020 WBAB 102.3 NY Babylon  
2355 WSNJ 107.7 NJ Bridgeton

8/28

Tr 2125 WJEJ 104.7 MD Hagerstown  
2200 WNCB 101.3 PA Lancaster (104)  
2230 WLAN 96.9 PA Lancaster  
2245 WSTW 93.7 DE Wilmington (86)  
2300 WCTX 92.1 PA Palmyra (120) WPVI  
2310 WCWP 88.1 NY Brookville, o/ACI ch6-/

8/29

Tr 0030 WNAV 99.1 MD Annapolis (158)  
0035 WPLR 99.1 CT New Haven (95)  
0040 WGRF 99.3 NJ Pleasantville

(Thanks for the report -- Hope you report your DX as you receive more distant stations - fjm)

## Convention Report On Page 16

NORTHERN FM-DX

October 1977

John Ebeling - 9209 Vincent Ave. So. - Bloomington, MN 55431 (CST)

Bloomington location-Eqt: Heathkit AJ-15 & Sony ST5130. 10-el. horiz yagi & vertical dipole.  
Prosit location-Eqt: Sherwood S2200 (tube) & 5-el. FM antenna in attic.  
From Bloomington.

8/1

Tr 2130 KPRM 97.5 MN Park Rapids, ex-103.7

8/2

Es 1047 WBEU 98.7 SC Beaufort, rock

1558 WPCH 94.9 GA Atlanta, m

1600 WCSE 92.3 NC Asheville, mx on SCA

1601 WQXI 94.1 GA Smyrna, country, "94Q"

1606 WHPE 95.5 NC High Point, gospel

1610 WSTS 96.5 NC Laurinburg

1631 WYID 96.1 NC Raleigh, "Wide"

1641 WNCT 107.7 NC Greenville, m, mx on SCA

1644 WXRI 105.3 VA Norfolk, g, Sunshine Radio

1645 WYFI 99.7 VA Norfolk, gospel

1646 WQDM 97.7 NC Kinston, rock

1648 WGMB 92.7 SC Georgetown, r, "98 rock"

8/2

MS\*2315 WDCX 99.5 NY Buffalo, good burst ID

\*2330 WKSW 99.5 OH Cleveland

8/8

MS\*0130 KQWH 94.1 NE Omaha

\*0230 WTOC 94.1 GA Savannah, k, "94-WTOC"

\*0430 WGFA 94.1 IL Watseka /long burst.

8/9

MS\*0345 WQOD 105.7 MI Grand Rapids, "OOD-FM"

8/10

MS\*0130 WPXI 95.1 SC Charleston

\*0215 KRDO 95.1 CO Colo. Sprgs, "\$95, KRDO"

Tr\*0300 KRDO 95.1 CO Colo. Sprgs, in 2 minutes

From Prosit:

7/23

Es 0227 WKLB 92.3 AL Montgomery, rock

0230 WRAS 88.5 GA Atlanta

8/22

Tr 1700 KPRM 97.5 MN Park Rapids

\* Times approx. as timer turns tape on for 5 min. every thr. 73's - John.

Paul D. Traska - 64 Weaver Ave. - Buffalo, NY 14206

Total: 176, States 22+DE, Prov 1, For 1, Stun 67

8/30

Tr 2150 WAEZ 97.5 OH Akron

2355 WWJ 97.1 MI Detroit

8/31

Tr 1215 CHBK 95.1 ON Chatham, Tone Testing

9/1

Tr 0320 WDSB 94.7 DE Dover

1200 WAMC 90.3 NY Albany

1500 WDBN 94.9 OH Medina

9/2

Tr 1155 CHAY 93.1 ON Barrie

Patrick Martin - PO Box 14192 - Portland, OR 97214 (PDT)

Eqt: Pioneer TX-9100/Winegard SC-650 approx. 200' above sea level.

7/18

Es 0732 KVMT 104.7 CO Vail, m

(850)

0736 KLGT 102.3 CO Breckenridge

(850)

0736 KLAK 107.5 CO Lakewood, country

(900)

0742 KBPJ 105.9 CO Denver, rock

(900)

0744 KOAG 103.5 CO Denver, ID

0746 KYEX 103.9 CO Canon City, ID

(940)

0749 KSPM 102.5 CO Woodland, ad

(900)

0751 KZLO 100.7 CO Pueblo, ID

(930)

0753 KPUB 99.9 CO Pueblo, ad

0754 KVMH 98.9 CO Pueblo, ad

0757 KDJQ 97.9 CO Pueblo, ID, rock

0759 KGLS 92.7 CO Glenwood Springs (900)

7/20

Es 1720 KLLI 96.3 TX Lubbock, ID (1300)

Tr 1725 KIT 94.5 WA Yakima, rock, ID (150)

7/25

Tr 0305 KSNB 93.1 OR Eugene, rock, ID (100)

0330 KPNW 99.1 OR Eugene, EL, ID (100)

0020 CKLG 99.3 BC Vancouver, rock, ID (250)

7/26

Tr 1930 CFRO 102.7 BC Vancouver, ID (250)

7/27

Es 1638 KEDM 94.9 NM Roswell, ID (1150)

Tr 1641 KRKT 99.9 OR Albany, country (65)

Es 1650 KGLP 94.5 NM Gallup, ID (1100)

1659 KLEK 94.5 TX Lubbock, ID (1300)

1701 KLLI 96.3 TX Lubbock, ID

7/27

Es 1709 KMTY 99.1 NM Clovis, ID (1150)

1715 KTCM 99.9 NM Clovis

Tr 1830 EWIQ 100.3 WA Moses Lake, k, EQFM off, / (200)

7/31

Tr 0050 KMBI 107.9 WA Spokane, g, ID (300)

MS 0120 KFWT 92.9 AZ Tucson, mx, ad (1000)

8/6

Tr 0112 CFMI 101.1 BC New Westminster, r/m (250)

1600 KUZZ 96.9 ID Nampa, rock, ID (310)

1640 KPMY 97.9 OR Eugene, rock (100)

8/7

Tr 2330 KRSB 103.1 OR Roseburg, ID (160)

8/14

Tr 2325 KXDD 106.3 WA Richland, rock, ID (200)

2350 KICN 98.9 WA Spokane, ID (300)

2359 KMBI 107.9 WA Spokane, news, ID

8/15

Tr 0009 KHQ 98.1 WA Spokane, rock, ID (300)

0011 KREM 92.9 WA Spokane, rock, ID

0015 KBOI 97.9 ID Boise, RT w/EL mx (300)

0702 KRZE 105.7 WA Spokane, music, ID

8/27

Tr 2219 KONA 105.3 WA Kennewick, ad, ID (200)

2227 KZUN 96.1 WA Opportunity, k (300)

8/28

Tr 0050 KREM 92.9 WA Spokane, ad, ID

That's all for now. Good DX....73's, Patrick

Robert Eddy - Box 338 - Newport, OH 45768 (EST)

6/2

Es 1241 CBC 96.9 PEI Charlottetown, contest

6/3

Tr 1756 WSOF 89.9 KY Madisonville, gospel, ID

6/5

Es 0916 KIOV 104.7 SD Sioux Falls, country, ada

0924 KMIT 102.3 SD Mitchell, mx, ad

0928 KGLY 99.5 SD Mobridge, gospel, ID, mx

6/5

Es 0931 KIXX 96.1 SD Watertown, mx, wx, "96Kicks"

0941 KQAD 100.9 MN Luverne, lcl news

1005 KGGG 100.3 SD Rapid City, rock, "KG100"

6/6

Es 1848 KHOO 99.9 TX Waco, news, ad, weather

1855 KERC 95.5 TX Waco, gospel program

1936 KRNY 98.9 NB Kearney, PSA, rock music



Robert Eddy report - continued.

6/6

Es 1938 KSD 96.9 NE Seward, advertisement  
1943 KFM 96.1 NE Omaha, music, promotion  
1947 KORI 96.5 NE Grand Island,wx,country  
2001 KFM 98.3 WY Torrington,ad,country  
2002 KDAQ 103.5 CO Denver, ID, rock music  
2003 KROA 95.7 NE Grand Island,wx,wx, ID  
2006 KGOR 99.9 NE Omaha,rock wx,promotion  
2006 KVO 99.5 CO Denver, ads, ID  
2018 KAD 105.1 CO Denver, FM netw, wx,wx  
2027 KLM 104.3 CO Longmont, rock,"Super O"  
2029 KIM 98.5 CO Denver, ID, rock music  
2031 KCOL 107.9 CO Ft. Collins,weather, ID  
2032 KIOZ 102.9 WY Laramie, weather  
2047 KRAI 93.7 CO Craig,news,sports,ads

6/9

Es 1626 KOLL 93.5 WY Gillette, rock, ads  
1636 KQSW 96.5 WY Rock Springs, wx, k  
Tr 1658 WVJC 89.1 IL Mt. Carmel,wx,ID,rock

6/14

Es 1622 WELX 92.9 AL Mobile,ads, soul music  
1725 KSKG 99.9 KS Salina, ads,rock,"99KG"  
1731 WJWB 97.3 KS Topeka,weather,rock wx  
1801 KJHK 90.7 KS Lawrence, ID, news  
1804 KMKI 96.7 KS McPherson, PSA,instrum  
1817 KHCC 90.1 KS Hutchinson,sports,rock  
1936 KLOQ 106.1 KS Lyons, advertisements  
1945 KVGB 104.3 KS Great Bend, PSA,wx

6/20

Es 2018 KBBB 104.3 TX Borger, promo,country  
2020 KATT 100.5 OK Oklahoma City,"Cat 100"  
2029 KZUU 102.7 OK Oklahoma City,"K-Zoo"  
2034 KJHP 97.7 OK Edmond, ad,r,"K-whip"  
2039 KQIZ 93.1 TX Amarillo, ads, rock wx  
2101 KSIW 93.5 OK Woodward, weather,ol wx  
2105 KKKX 100.3 KS Colby, ads, Royals BB

6/21

Es 1831 KIVI 92.7 TX Crockett, program promo  
1841 KSLI 96.9 LA Alexandria, rock music  
1848 KATD 97.5 TX Beaumont, rock,PSA, wx  
1859 KTRU 91.7 TX Houston, ID,news, rock  
1904 KQUL 103.3 TX Sinton, news, country  
1906 KIOF 106.1 TX Orange, ad, rock  
1930 KRAZ 101.7 LA Deridder, ads  
1932 KMAR 95.9 LA Willsboro, ad, lol BB

6/23

Es 1856 KAMU 90.3 TX College Station, ID

6/30

Es 1728 KUMH 90.1 NM Albuquerque, rock  
1758 KIPC 91.5 NM Albuquerque, ID,wx,sports  
1817 KRMF 98.3 TX Spearman, ad, ID, music  
2001 KVMO 90.7 NE Omaha,feature,concert  
2004 KQWH 94.1 NE Omaha, rock music  
2005 KMBE 92.9 NE Beatrice, promo,k

7/3

Es 1830 WEEJ 100.1 FL Port Charlotte, ad  
2204 KGTN 96.7 TX Georgetown, ad, BB

7/4

Es 1649 KACH 94.9 MN Duluth, country music  
1650 WAKX 98.9 MN Duluth, weather,rock  
1703 KFM 89.3 ND Grand Forks, 4th celebr

7/7

Es 1156 KUAD 99.1 CO Windsor, wx,ad, ID,rock  
1500 CHH 102.7 NS Halifax, news  
1502 CHCL 100.9 NS Truro, weather, music  
1523 WQDY 92.7 ME Calais,rock, ad  
1525 WHGX 93.1 ME Portland,ad, weather  
1529 WCOU 93.9 ME Lewiston, ads  
1529 WPEC 92.9 ME Bangor, ads, wx, music  
1533 WJBQ 106.3 ME Scarborough,rock, ad  
1536 WIGY 105.9 ME Bath, rock, ads

7/7

Es 1540 CFQM 103.9 NB Moncton, news, ad  
1544 WGAN 102.9 ME Portland, advertisement  
1545 CBZF 102.3 NE St. John, Ffo, wx annt  
1551 WKXR 107.1 NH Exeter, bulletin board  
1552 WHEM 107.5 ME Lewiston, ads, weather  
1556 WMT 104.3 ME Gardiner,promo,rock  
1556 WXLQ 103.7 NH Berlin, ad, sports  
1558 WFAU 101.3 ME Augusta, news, PSA, wx  
1600 WLXN 99.3 ME Lincoln, news, ads  
1602 WHOU 100.1 ME Houlton, news, PSA, wx  
1610 WRUM 96.3 ME Rumford, ad, sports  
1615 WEF 92.9 VT Burlington, ads  
1617 WQCR 98.9 VT Burlington, promo, rock  
1620 CFQR 92.5 PQ Montreal, wx, ads, ID  
1637 WDEA 90.1 ME Portland, news  
1643 WBGW 97.1 ME Bangor, country music,ads  
1645 WLNH 98.3 NH Laconia, ad, weather  
1707 WQRC 99.9 MA Barnstable, news, ad  
1720 CFEC 98.9 NB St. John, ad, instrum wx

7/9

Tr 2157 WRAA 88.9 MD Baltimore, rock, ID

7/12

Es 2004 KHIM 98.3 TX Palestine, weather  
2030 KFRD 104.9 TX Rosenberg, baseball  
2044 KNCN 101.3 TX Sinton, ads,r,"C-101"

7/14

Tr 2017 WMRV 105.7 NY Endicott, advertisement  
2036 WQIX 100.9 NY Horseheads, music  
2038 WAAL 99.1 NY Binghamton, weather, ads  
2043 WQYT 98.1 NY Binghamton, ads  
2112 WQIV 105.1 NY Deruyter, ad,g, CHN netw.  
2159 WHCU 97.3 NY Ithaca, rock  
2215 WICH 91.7 NY Ithaca, rock  
2240 WIBQ 98.7 NY Ithaca, beautiful music  
2245 WKGW 104.3 NY Utica, rock, promotion  
2255 WJIV 101.9 NY Cherry Valley, g, //WOIV

7/23

Tr 2151 WSEI 92.9 IL Olney, advertisement

7/27

Es 2057 WTUL 91.5 LA New Orleans, PSA,wx summary

7/29

Es 1722 KGRA 103.7 LA Lake Charles, rock ,ad  
1725 KUPO 106.5 TX Galveston, ads  
1739 KNOE 101.9 LA Monroe, ads, rock music  
1743 KTXJ 102.3 TX Jasper, advertisements  
1751 KMBS 96.1 TX Harlington,SS/EE ID,annts  
1832 KSPA 92.1 TX Nacodoches, promotion  
1913 KPOP 97.7 TX Kingsville, PSA, ID,"K-Pop"  
1950 KOTE 94.9 TX Laredo, ads, rock

7/31

Es 1847 KFOR 102.7 NE Lincoln, ad, ID  
1855 KSNF 101.1 KS Oberlin,"Proud Country"  
1914 KLIN 107.3 NE Lincoln, ad,promo,instrum  
1916 KHAT 106.3 NE Lincoln, ad, ID,country wx  
1922 KFMQ 101.9 NE Lincoln, ads, rock music  
1924 KABL 104.9 NE York, ads, baseball game  
1932 KJSK 101.1 NE Columbus, weather,PSA,ad

8/3

Es 1628 WWSA 89.9 WI Brule, NPR feature, ID  
1728 KMT 100.7 MN Alexandria, country wx,ad  
1740 KOOO 104.5 NE Omaha, ad, country music  
1742 KBEM 88.5 MN Minneapolis,weather,rock  
1753 KTVH 107.9 MN Anoka, local news, ads  
1756 WIXX 107.1 WI New Richmond, ad, rock  
1758 KXWS 105.9 MN Wadena, advertisements  
1801 KJAN 103.7 IA Atlantic, ad, news  
1804 KDUZ 107.1 MN Hutchinson, wx, farm news  
1807 KNEI 103.9 IA Waukon, news  
1808 WOSH 103.9 WI Oshkosh, promotion  
1814 WWJO 98.1 MN St. Cloud, promo,country

# C.C.I. [UNIDENTIFIED DX]

Frank Aden, Jr.  
1535 NW Ithaca  
Bend OR 97701  
(503) 389-5488  
Deadline: 10th

OCTOBER 1977 Is this the largest column of the year?

## Unidentified TV DX

Eric Fader, 23-35 Bell Blvd., Bayside NY 11360 (1977 unIDs)

Thu Aug 4 Tr ch 3 2204 EDT- -Station zoomed in on large map of USA with Chicago and large cities lettered on it. Words then seen on screen "This morning" and large 3. Went into movie later not network programing. May have been NBC station which elected not to carry the "Sam Sheppard Murder Case". WSYR? PTA: To NE. (TV GUIDES no help but logo drawn does look somewhat like WSYR's. ---FEA)

Mike Reid, 109 Arjay Cr., Willowdale, ONT M2L 1C6 (1977 unIDs)

Wed May 4 MS ch 2 0423 EDT- -"Phil Donahue Show" Ant. WSW, SW  
Thu May 5 MS ch 2 0504 EDT- -Slide with AR address seen. Looked like end of record commercial.  
Fri May 27 Tr ch 33 0721 EDT- -Res-C seen and sign on at 0731. New England TVGs say WETK not on. There is a ch 33 xltr in Utica NY but its primary is WCNY-it was running a 3/4 CB at 0721. Ant. E.  
Thu Jun 9 Es ch 3 0404 EDT- -ZEs? "Tomorrow Show". Ant. W. MDT ch 3's do not run it this late. KCRA? KORK? (Both KCRA and KORK have it at this time. ---FEA)  
ch 3 0412 EDT- -ZEs? Final news. Ant. W. Looked like replay of 11pm news (to 0430). CO, NE, WY in earlier.  
Mon Jun 20 Es ch 2 0141 EDT- -"PTL Club" Ant. W, NW. (TV GUIDES no help. ---FEA)  
Sun Jul 3 Es ch 2 1827 EDT- -"Big 2 News", NBC affiliate. Ant. SW, KATC on 3. (Probably KPRC but may also be KMID. ---FEA)  
Mon Jul 4 MS ch 2 0219 EDT- -"700 Club" to 0230. Ant. WSW. (Does anyone have a "700 Club", "CBN" station list? ---FEA)  
Es ch 3 1329 EDT- -"Big News" CBS station. KNOP and WDAF in. (No help from TV GUIDES. ---FEA)

Dean Markoshan, 10636 Ave. B, Chicago IL 60617 (1977 unIDs)

Tue Jul 17 Es ch 4 1830 CDT- -Station ID "Voice of the South". Ant. S. (Ok you guys in Dixie---who is it? ---FEA)  
Tue Jul 26 Es ch 3 1929 CDT- -Malcolm Poindexter. Boxing in background. Ant. W. (Nothing in any Western TV GUIDE. ---FEA)  
Sun Jul 31 Es ch 3 0210 CDT- -"David Susskind" Antenna SW. (KENW runs it at 0645. ---FEA)  
ch 3 0215 CDT- -Dean Martin Movie. PTA: SW.

Robert Goodman, 2030 Haring Ave., Bronx NY 10461 (1977 unIDs)

Sat Jun 4 Es ch 4 1200 CDT -"Big News" program or promo. PTA: Texas. (No help from TV GUIDES. ---FEA)  
Mon Jun 6 Es ch 3 1640 CDT- -Slo-no bird flight on program. Cowboy picture also seen may have been "Bonanza".  
1707 CDT- -Man standing with mike; interview, subtitle: "Leopold .."  
1845 CDT- -Dialogue between two women.  
1900 CDT- -Promo for "Best of Donny & Marie." Much of the audio on 3 for this date was French but not necessarily from same station. Who else programs in French on 3 besides Rimouski? (I have CBWFT, CBHFT, CBVT2, CBFT2 listed as French on 3. ---FEA)  
Wed Aug 3 Es ch 3 1130 CDT- -"Marcus Welby" PTA: S and Central. MO and FL seen. (GA and LA stations negative. ---FEA)  
1800 CDT- -"Family Feud" PTA: Same as above. (GA, LA, AR & MO stations negative. ---FEA)

Michael Scheel, 4126 Nobis Dr., Davenport IA 52801 (1977 unIDs)

Fri Apr 29 Au ch 29 0815 CDT- -Kids singing, PES type show. In for about 30 sec. KHNE? WRSO? (KET and NETV stations are both negative; KET listed as not on at this time, NETV runs "Nova" at this time. ---FEA)

Michael Scheel Continued,

Fri May 27 Es ch 2 1015 CST- "NBC Today Show" Man with wire frame glasses, medium cut dark hair. Pat Dyer saw KTCA at 0959. PTA: West (KOAI lists it from 0800 to 1000 CST. ---FEA)

Tue May 31 Es ch 2 1530 CST- Delayed "Hollywood Squares" PTA: West (KTVQ checks, KBCI is negative. ---FEA)

Mon Jun 6 Es ch 2 1613 CST- "Brady Bunch" PTA: NE States. (WKTV runs it at 1600 CLT. ---FEA)

**WKTV**  
**ch2**

1617 CST- "Gomer Pyle" PTA: NE (Nothing in NE checks. ---FEA)

1631 CST- "Adam 12" (WKTV has it at 1630 CLT. ---FEA)

2102 CST- "The Jeffersons" (KTVN runs it at 2100 CLT. ---FEA)

2139 CST- "Little House on the Prairie" PTA: West. (KOAI has it from 2100 to 2200 CLT. ---FEA)

Tue Jun 7 Es ch 3 1813 CST- "Barney Miller" (TV GUIDES no help. ---FEA)

1833 CST- "MASH" PTA: Quebec and Maritime Provinces. (Same results as above. ---FEA)

Thu Jun 9 Es ch 2 1710 CST- "Match Game" PTA: South

1714 CST- "Beverly Hillsbillies" PTA: South

Tue Jun 21 Es ch 3 1545 CST- "Virginian" or ?

ch 2 1741 CST- "Gilligan's Isle"

ch 5 1817 CST- "25,000 \$ Pyramid" with Loretta Swift & Mike Farrell.

1820 CST- Interview program.

1831 CST- "Wildkingdom" Program location was Colorado.

1837 CST- "To Tell the Truth" PTA: For this and above South.

Thu Jun 23 Es ch 5 1827 CST- Interview program. PTA: South, same for below.

1853 CST- "New Treasure Hunt"

ch 2 1854 CST- Astronomy lecture.

Fri Jul 1 Es ch 2 1850 CST- "Galebrety Sweepstakes" PTA: South

Tue Jul 12 Es ch 2 1415 CST- "PTL Club" or similar type show PTA: Middle Atlantic states. (TV GUIDES negative. ---FEA)

Tue Jul 26 Es ch 5 1835 CST- "100,000 \$ Name that Tune" PTA: See Below

1840 CST- "Hogan's Heroes" Suspect WITG or WNEW. (Both negative. ---FEA)



**KTVN-2**  
**RENO**

Steve Shaffer, 10956 Indpls. Blvd., Box 4, Hammond IN 46326 (1977 unID)

Wed Jul 27 Tr ch 9 0600 CDT- TP with Sault St. Marie. At 0600 "this is ... using channel 9 for purpose of identification." 9 or 10 K calls were then read. One was for a Gun ... Springs. Could it be a new CDM station? (No as there are no allocations for this channel in Sault St. Marie ONT, I have no listings for a new station on US side. Anyone have any ideas? ---FEA)

Edward Cotton, 4106 2nd St., Chesapeake VA 23324 (1977 unID)

Thu Jul 21 Es ch 5 1730 EDT- Ant. SSE News in unrecognized language. Had slide for ch 13 with "channel" printed in center of 3. Mountains drawn in background. "DEL" over 1 of 13 and A?? up left side of 1. See drawing to left. (Does anyone recognize this slide? None of my lists has anything like this. ---FEA)



Unidentified FM DX

Frank Aden, Jr. address on first page of CCI (1977 unID)

Tue Jun 28 Es 97.3 2205 FMT- Weather for Medicine Hat on what appeared to be CBC net station. None of my listings have a CBC station on this frequency in Alberta.

Michael Scheel address on first page of CCI (1977 unID)

Tue Jul 12 Es 94.1+1 2000 CST- Phillies/St Louis Ball game. Offer for Phillies helmet heard.

Harry Hayes, Star Bts., Box 2660, Gouldsboro PA 16424 (1977 unIDs)

Mon May 30 Es 96.1 1720 EDT- Station QRMING KWAT w/baseball game with mention of



Harry Hayes continued.

Lake City, PTA: MN, SD (There is a Lake City MN north of Rochester MN on the Miss. River but I can not find any stations on 96.1 in that area. ---FEA)

Sun Jul 31 Es 105.5 1727 EDT- Station calling itself "KGB-105" PTA: IA, NE  
101.5 1747 EDT- Call given as KSID or KSIP. PTA: IA, NE

Wed Aug 3 Es 101.7 1905 EDT- Station giving call as KHEB or KDKB. Some parts heard were "Whenever News breaks 'KB' (or 'KD') gets it on". Then into WABC type jingle with group saying "Start the Music ---KHEB" Station was top 40 format. PTA: MO, IL, IA or NE. (Not KHEB as it is on 93.3 in Mesa AZ. ---FEA)

#### Identifications

Robert Williams, Jun 8, ch. 3, 1853 MDT. KINE schedules are positive.

#### TV Guide Information

John Combs reports that the Florida Editions of TV GUIDE have been changed and a new Orlando Edition lists WDBO-6, MFTV-9, WFLA-24, WESH-2, WRDZ-3, WFLA-8, WTVT-13, WUSF-16, WWCY-10, WTOG-44, WJCT-7, WCIH-6 and WKID-51 (partial schedule). John mentions that there still maybe a Central Florida Edition or may have been split into three parts. He reported that more information will be sent in as he learns more about the changes.

#### PERSONNEL

Paul Stewart  
Harvey Hollander  
John Ward  
Gordon Johns  
Joe Irvine  
Ken Boyce  
Ethel Rostch

President  
Vice-President, Operations  
Vice-President, Sales  
Manager, CJCH-TV, Halifax  
Manager, CKCW-TV, Moncton  
Manager, CKJB-TV, Sydney  
Atlantic Television System  
Traffic Co-ordinator, Moncton



ATLANTIC  
TELEVISION SYSTEM

Up-dater on ATV

If you notice any changes in your local issues of TV GUIDE please let me know as I am planning a regional office up-dater for early 1978.

<b>cjch-tv</b>	Halifax	CJCH-TV CJCH-TV	Halifax Canning	CJCH-TV CJCH-TV	Colchester Yarmouth
<b>ckcw-tv</b>	Moncton	CKCW-TV CKCW-TV CKAB-TV	Moncton Charlottetown Newcastle/Chatham	CKAM-TV CKAM-TV CKCB-TV	Stokely Bridgeton Cape Breton
<b>cklt-tv</b>	Saint John	CKLT-TV CKLT-TV	Saint John Woodstock	CKLT-TV	Bellevue
<b>cjcb-tv</b>	Sydney	CJCB-TV CJCB-TV CJCB-TV	Sydney Inverness Antigonish	CJCB-TV CJCB-TV CJCB-TV	Digital New Glasgow Bay St Lawrence



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Now just \$17 wired; \$13 in kit form, postpaid by first class mail from: Bruce Elving, 18 1/2 East Fifth Street, Duluth MN, 55806.

# PORTLAND: THE WAY IT WAS...

WTFDA's first West Coast convention seemed beset with tragedy at first with John Zondlo's car breaking down in Laramie WY, Bill Frahm stranded at his station and Dr. Bruce Elving also unable to make it. Overall, the 1977 WTFDA Convention was enjoyed by all who attended, with many interesting activities occurring during August 5th, 6th and 7th.

About 30 DXers attended the convention at the Flamingo Motel in Portland, Oregon, coming from many parts of the country. Bill Grant was the first to arrive--on the 1st after a tour of many western National Parks. Frank Aden, Jr. and Joe Gragg arrived the morning of the 3rd, and later that night with the arrival of Bill Block, the four watched skip from Los Angeles, Las Vegas and Phoenix. Late Wednesday night, hosts Bill Block and Frank Aden, Jr. picked Don Erickson up at the airport.

Thursday morning saw some of the early arrivals touring the city, with the Portland Rose Gardens, Washington Park, transmitter sites of the Portland TV outlets, downtown Portland and the famous Lloyd Center as sites seen. With John Zondlo and Bill Frahm calling in their bad news that afternoon, part of the group chose to see the new James Bond movie, "The Spy Who Loved Me." After the show, Bill Block, Joe Gragg, Frank Aden, Jr., and Bill Grant went to Pat Martin's place for a look at his DX equipment. While Bob Rusk was preparing the Convention Packer, the group saw some interesting aurora and tropo DX, with the Au reception being Joe Gragg's first exposure to that unusual form of DX.

Friday morning was the official start of the Convention, with the arrival of a majority of the conventioners. Host Frank Aden, Jr. opened the meeting room at 9 a.m. At 10 a.m. part of the group led by Bill Block and Frank Aden, Jr. were given an extensive tour of the KGW Building, which houses KGW-AM-TV and KINK(FM). Returning to the motel, the conventioners were interviewed by Janis Gray of the Portland Oregonian for a newspaper feature. Friday afternoon saw many of the DXers on the Flamingo's roof, where host Pat Martin and others helped to erect an antenna for the meeting room's receivers. Pat Martin donated a mast and antenna, Paul Wardell contributed a color TV set and Frank Aden, Jr. gave a rotor for the installation. Friday evening had the traditional gab sessions, showing of DX slides, looking at QSL collections and listening to DX tapes. Dr. Bruce Elving's ANARC 1977 speech was also heard by the convention delegates.

Phil Bytheway was auctioneer for the WTFDA auction later Friday night, with over \$35 collected for our club. A large quantity of club supplies were also sold to DXers during the Convention.

Saturday morning brought what many felt was the highlight of the Convention, a DXpedition to Oregon's highest peak, Mt. Hood. The conventioners assembled in the parking lot of Timberline Lodge at the 6000-foot level. Dale Connolly's DX van equipped with FM receiver, color TV and antennas became the convention center on Mt. Hood, with many DXers trying out the equipment. FM DX was heard from as far away as Sacramento CA (KFBK) and UHF TV was seen from Pasco WA (KEPR-19). Before leaving Mt. Hood, the group toured the lodge and ate lunch in the lodge's restaurant.

Returning from Mt. Hood, the conventioners gathered for a group photo in front of the Flamingo's fountain. 6 p.m. brought the first guest speaker, KATU-TV 2 chief engineer Bill Vandermay. Mr. Vandermay brought along reception reports collected over the years; a few were from well known WTFDAers! His talk included translators, reception reports, technical aspects of KATU and how they deal with the public about E-skip interference. At 7 p.m. a majority of the DXers convened in the Flamingo's banquet room for the traditional feast. Returning to the meeting room, the second guest speaker was introduced Dave Primuth, station operations manager of KWAX, the University of Oregon's classical FM station. Mr. Primuth covered public radio, station programming policy and the history of KWAX (whose call letters were chosen because it is the voice of the U of O "Ducks"!)

At 8:30 p.m. an informal business meeting was conducted with John Zondlo and Mike Hogan connected by phone from Indiana. While Frank Aden, Jr. asked for comments and suggestions, Pat Martin relayed the information to John and Mike. The hottest topic was late VUDs and what solutions existed. It was announced that a new edition of the WTFDA TV STATION GUIDE is being planned. Frank Aden



followed the meeting with a talk on identifying those unidentified DX catches. Joe Gragg then spoke on what causes TV and FM DX. His talk lasted over two hours, taking credit for being the longest speech ever at a WTFDA Convention!

Sunday morning the conventioners broke off into groups of five and six and headed for Portland's Mt. Tabor Park for a picnic and a DX session in Dale Connolly's van. Dale also played some of his DX tapes, including his unusual MS catch of Cuban FM. By Sunday afternoon many of the conventioners were on the way home. The remaining DXers kept the meeting room open until 6 p.m. when the Convention officially closed, but not before a visit from a bewildered man dressed in only a towel who was believed to be looking for the steam room!

Results of the WTFDA prize drawing:

GRAND PRIZE: A Sanyo AM-FM Stereo Portable Radio, won by Evelyn Portzer

SECOND PRIZE: A Realistic Weather Radio, won by Don Erickson

THIRD PRIZE: A TV/FM Antenna Book, won by Jim Korn

A color photo package of the Convention is available from Bill Block. For more information, write Bill at 133 SE 31st Street, Portland OR 97214.

On behalf of Convention hosts Bill Block, Pat Martin and Paul Wardell, I would like to thank Bob Rusk for his work and research on the Convention Information Packet, and Bruce Elving, who donated a copy of his FM Atlas for the auction

Frank Aden, Jr.



## The Portland People!

FRONT ROW Eldon Luoma, Bill Block, John Jefferson, Bo Somerville, John Clements, Mark Campbell, Clint McAuliffe, Dale Connolly, Tracy Wood, Bill Grant, Danny Buntin, Ron Wing, Dave Primuth.

BACK ROW. Don Erickson, Bruce Portzer, Evelyn Portzer, Rich Segalas, Phil Bytheway, Paul Wardell, Jim Korn, Joe Gragg

NOT SHOWN. Frank Aden Jr., Pat Martin, Bob Rusk, Mike Northam, Bob Bodell, Dave Williams, Mel Hickman.





DXers look on as Convention co-host Pat Martin constructs and completes the antenna installation atop Portland's Flamingo Hotel (the 1977 convention center)



In the meeting room Friday Joe Cragg on DX causes, Frank Aden on IDing . ILs



Scenic Mt. Hood, 6000 feet altitude, as seen from the Timberline Lodge (right).



That's Clint McAuliffe stepping out of Dale Connolly's well-outfitted "DX van" (complete with "FM DX" California license plates!) at the Mt. Hood DX session



Bill Grant, Dale Connolly, and Tracy Wood erect the TV/FM antennas, others help to mount them atop Dale's van, and all present participate in the mobile DX fun!



LEFT WFFDAers pose briefly after a very productive DX session up on Mt. Hood  
RIGHT A DXpedition to Portland's Mt. Tabor Park ended the Convention for many.

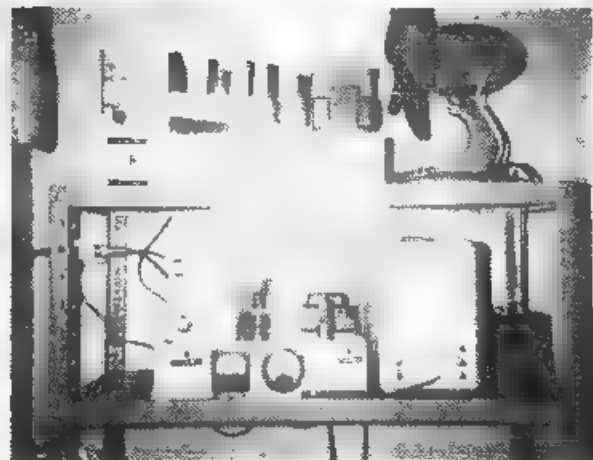
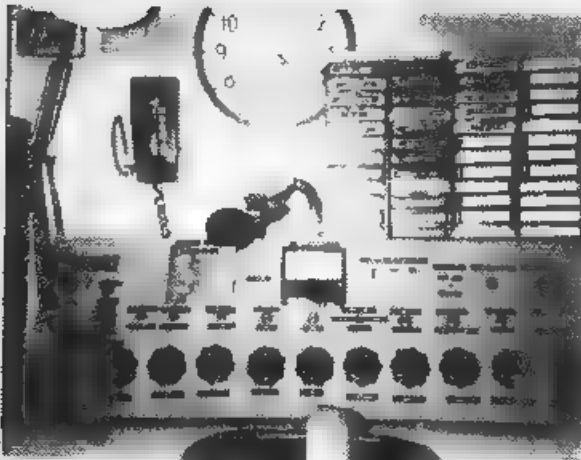
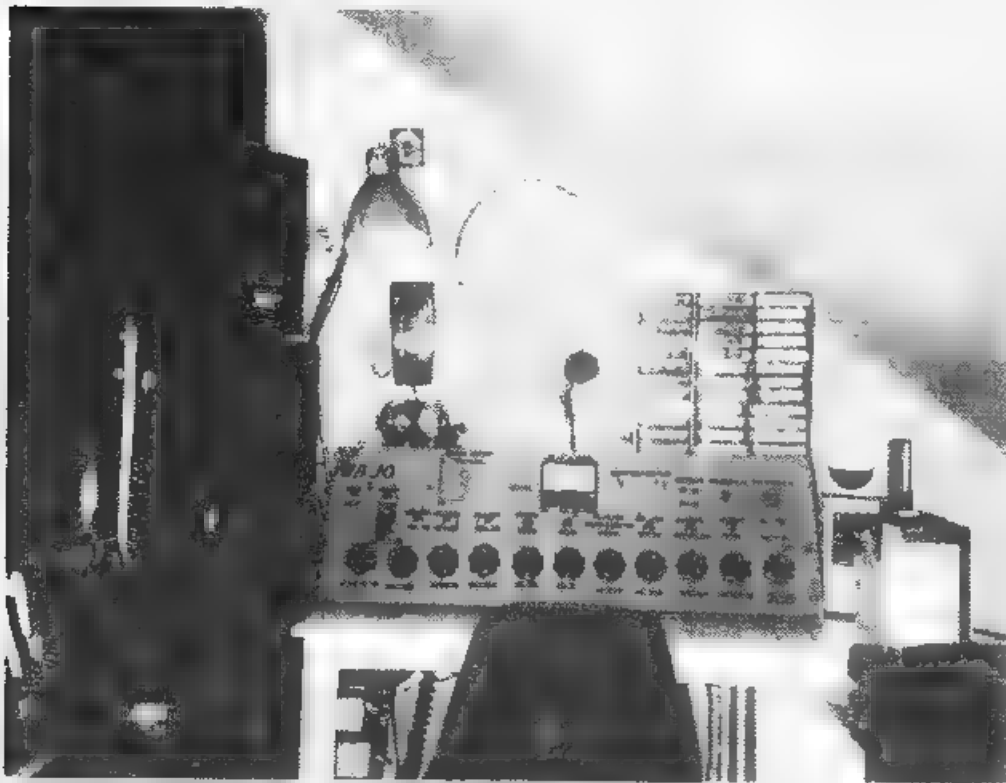
# PHOTO-NEWS

Features: It's not your average, everyday FM station

This month, PHOTO-NEWS pays a visit to illegal FM radio station "WBJQ" 88.7 Highland LA. VUD editor Clarke Ingram visited "WBJQ" on July 29, and, with the owner's permission, took the photos which appear on this page. First is shown an overall view of the "WBJQ" air studio (which, Clarke notes, "compares well to many small commercial stations"). At bottom left is a close-up of the "WBJQ" control board and cart rack. At bottom right are, on the bottom rack (from left to right), the FM amplifier, multiplex generator, and transmitter transfer unit; and on the top rack, the "WBJQ" transmitter, complete with an electric fan to keep it cool (sounds like my TV set, hi - jja). For further information on "WBJQ," see recent FCC FM NEWS columns.

My thanks to Clarke Ingram for this month's feature.

73 and good DL, *Jim*





## PART ONE:

Tips and Techniques for the DXer and DXer/Builder

Even nearly ten years after its founding, the nucleus of WTTFA is formed of AIPers. But more and more new TV or FM DXers come along and display a real interest in all phases of DXing. That is, they want to know more about the "whys." Also, the average age of members is much higher, as illustrated by the recent WTTFA member survey. Whereas AIPers were almost entirely made up of 16-20 year olds in the 1950s plus a few middle-aged (but most active) members like Art Collins, B.J. Bingham, and Tom Hidley (all deceased), most members now seem to be in their upper twenties and early thirties. Most have what I might call "dollar power"; that is, besides an intense curiosity, they are able to purchase sophisticated DX gear.

The purpose of this series might be summed up as follows: To allow DXers to self-educate themselves by using inexpensive devices (or, in many cases, devices they already have) and utilizing techniques that will allow them to get more out of the hobby and the equipment they use. True, most benefit will be for those who like to dabble and learn a little more about the "whys." But I think I can convince even the "non-dabbler" that an awareness of certain techniques will result in more satisfying DXing.

It is most disturbing when a DXer cheats himself by failing to apply the devices (or build them) with material he already has. It's one matter to compute the value of X dollars of equipment against the probable benefit. It's another matter to sacrifice performance due to unawareness.

What can you expect from this series? Well, we'll be looking at signal strength indicators (you may have one and not know it), attenuators that you can make for pennies, reference dipoles you can construct, etc. At the end of each topic, you'll see how the device and techniques can aid your DXing. After all these devices are discussed, we'll put them together and see just how they help your DXing efforts.

The Need for Signal Strength Indication

Most DXers at least once must have said, "Gee, that station is strong. It must be X times as strong as usual." The ability to tell, at least comparatively, differences in signal strengths seems well worthwhile. Let's list just a few benefits:

- 1) Curiosity. Even for the nontechnical, it would seem quite interesting knowing just how much stronger, for example, a semi-local becomes during improved conditions. Or, it might be interesting noting how much stronger a station becomes compared to a nearby DXer's similar reception.
- 2) The ability to tell how fast an opening is building up, or decaying, by using fringe stations in various directions as indicators.
- 3) Knowing and recording the daily signal strengths of locals and semilocals. All of us are aware of increased tropospheric (tropo) reception in the warmer months. Recording this info in normal and DX conditions might prove interesting. It might be possible to evaluate conditions on a day-to-day, month-to-month basis, from one season to the next. You might more clearly see which paths are most likely to open under certain conditions.
- 4) Detecting amplifier malfunction. Any amplifying device, especially tube type, can run down. If this occurs slowly and you aren't aware of it, you could be running with a less than totally efficient TV RF amp or a half-dead mast mounted amp. The strong locals, of course, will not seem affected. Periodic signal strength checks should create suspicion of such problems.
- 5) Equipment evaluation and checks. Antenna comparison is easy if you know how to translate the signal strength readings into meaningful data. (This will be discussed later when we combine meters, attenuators, etc. and "calibrate" our meter.) Also, amplifier gain, filtering, trap loss, or equipment insertion loss can be easily checked. Gain, F/R ratio, and directivity of antennas can be at least roughly measured using the techniques described in this series.
- 6) Adjusting DXing aids for optimum performance. Some DXers might have no interest in the topics mentioned above. They may, however, use selective tunable traps like the old CM and Jerrold types. Without a signal meter to see what's happening, you might be missing several dB of attenuation, and that just might be enough to miss a weak adjacent channel ID. In fact, I've tuned my Jerrold by watching the TV screen only, then returned with a signal strength meter, and the difference was as much as 6 to 8 dB. (NOTE: Some may not be too thrilled with the idea of using a meter to read signal strength because one can see signal difference on the tube. However, I doubt if more than a few DXers realize what a 6 dB increase (twice the voltage) would look like. In fact, a 10 times voltage gain (20 dB) of a strong signal might seem minor, but a 6 dB improvement in a weak signal might be enough for an ID. Also, it is next to impossible to remember the signal level of a station from day to day. Something to hang your hat on—a number—is needed.)

The professional field strength meter (FSM) simply measures a select signal in microvolts. A microvolt is one-millionth of a volt (0.000001). As you might expect, an FSM is quite costly. It's great if you have one or access to one, but otherwise hardly worth the cost.

Several articles have been written previously describing construction of signal strength meters (S-meters) for connection into some part of your receiver. Many of these S-meters have some disadvantages and limitations, but it may be worth the cost. (Price may vary from maybe \$5 up to around \$30 depending on the type, availability of junk box parts, etc.)

For those DXers who have certain volt-ohm-milliammeters (VOMs) or any type of VTVM, signal indication is just a matter of connecting into the correct circuit. Signal strength reading can be made at a few points in a TV, but the AGC circuit is most convenient. In fact, most build-it type S-meters connect into the AGC line.

#### Signal Strength Detection Via AGC Line

Every TV receiver has an AGC (automatic gain control) circuit. Although circuits vary, all have one thing in common: They sense input signal level and control the RF and IF amplifier gain. Basically, AGC action is much like a tester-totter. A 200-pounder on one end of a center balanced tester will not get off the ground with a 100-pounder on the other end. Similarly, a weak signal may not be seen unless all amplifiers are told to amplify. But if amplifiers were run at full gain, they would overload when strong signals arrive. The AGC provides the adjustable gain necessary for all conditions by supplying a varying DC voltage to the bias circuits. For any value of input, therefore, a given AGC voltage is fed to the amplifiers. Normally, one voltage range feeds the RF amplifier, another range feeds the IF.

You can read AGC voltage conveniently (usually) at the tuner itself. Most tuners seem to have a terminal block or lug strip that accepts wire for B+, heaters, and AGC. If you have a VOM or a VTVM, you can easily determine B+ and the rest, and isolate the AGC line. When you connect from AGC to ground, you should see a varying low DC voltage when antenna is rotated. Or, you should see a voltage change from strong and weak signal.

Range of AGC voltage will vary. With no signal received, RF amp will be fully on; with strong signal, amp will be nearly off. However, tube type RF amps are often biased so that they need an AGC voltage of changing polarity to control adequately over the range needed. Typically, the AGC voltage might be +0.5 volts with a blank channel monitored (full gain). As signal received increases, voltage goes toward zero. A stronger signal causes -0.1, -0.2, etc. readings. You must change meter polarity when you pass through the zero point. My Zenith's AGC range is from about +0.6 to -7.0 volts. Ranges will differ with individual design.

**NOTE:** For the technically curious, reason for the "dual polarity" AGC action is quite simple. A tube RF amplifier without an external bias voltage in the popular grounded cathode circuit will have some negative potential (usually less than a volt) on its grid. This is because of the so-called "contact bias" due to diode action between grid and cathode. Consequently, a tube so connected is almost fully on because it is almost biased for maximum gain, the only thing not allowing maximum gain being that small diode drop from grid to cathode. A small positive signal, however, being slightly less than the small "contact bias," will buck the diode drop and cause a total bias that makes the tube full on. At one value of received signal, the AGC voltage is 0, and the tube operates entirely on "diode drop." As received signal increases, of course, a negative AGC voltage is added to the negative diode drop to turn the tube further off.

Any VTVM (vacuum tube voltmeter) will work fine with the above method because it has a very high input impedance. This means connecting it into a circuit for measuring voltage does not disturb the actual circuit parameters. A high-input impedance VOM should work also. However, a low impedance type might disturb the AGC circuit and detract from AGC action. Try it with weak and strong signals and note the difference on the picture tube as the meter is connected. If it changes the signal strength very little, it can still be used because you need connect the meter only when you check signal strength. A 20,000-ohm-per-volt type meter should work fine, but again, much depends upon the component values, circuit time constant, etc.

#### S-Meter Limitations, Calibration, and Uses

The common dual-polarity TV AGC voltage mentioned above is a small nuisance rather than a limitation. If switching from + to - on the meter is cumbersome, you can simply re-zero your meter so that voltage swing is entirely negative. That is, simply select the DC meter scale you need, obtain a completely blank channel, and reset the zero adjust for 0 volts. Now, meter deflection will increase negatively as signal strength increases. You must re-zero if changing scales.

I don't re-zero since changing polarity is no problem. However, I do check occasionally that the needle points to zero when disconnected from the AGC line. If you record daily local signal levels, be sure your AGC control is set in the same position—usually "distant" is used.

I have not discussed the so-called speed of the AGC action. Some receivers (RXs) have fast AGC where a sudden change in signal input produces fast AGC action. Some RXs are "slower." Both can be helpful for certain forms of reception. Although I never calculated time constants of various AGC circuits, fast or slow, I don't think these differences will affect signal readings.

#### Calibration

AGC voltage in itself does not indicate how many microvolts are at the tuner input. However, you possibly can calibrate your meter to tell relative differences (twice, 50%, four times, 25%, etc.) And if you're lucky, you may be able to translate AGC voltage into an equivalent micro-volt reading. On the next page are some methods which may accomplish this:

**FSM METHOD:** If you can borrow a professional FSM, you're in. Simply note FSM reading and AGC voltage for several values from rock solid to weak signals. Draw a chart or curve from these readings. The more readings the better, naturally. (NOTE: It's tricky calibrating a meter if signal input is unsteady, but these values are of prime interest because much of your weak distant trope will produce signal levels of this type. If you're familiar with test equipment you may be able to feed a known signal level from an RF generator into the TV for calibration.

**CHART METHOD:** Some TV manufacturers may have curves that plot tuner and IF amplifier AGC voltage versus input signal in microvolts. I've seen a few of these curves, but frankly don't know if you could obtain one for your particular receiver.

**ATTEN/ATOR METHOD:** This method does not give you actual microvolts, but it is effective for determining relative indication. If you can obtain a variable attenuator, you can select several signal levels and note what AGC voltage becomes when the attenuator is added. Since this is the most likely calibration method, let's go through an example.

Assume you have an attenuator (or individual pads) so you can get 3, 6, 12, and 20 dB of attenuation at the receiver.

1. Select a strong, stable signal. Assume the resultant AGC voltage is -2.6.
- 2) Add 3 dB attenuator and note AGC voltage. Assume it decreases to -2.4 volts.
- 3) Repeat by adding other steps of attenuation.
- 4 With no attenuation, select a new value by rotating antenna, changing channels, etc. and then repeat. Do this as often as necessary until several readings are taken for weak/strong signals. Assume that the result is a table as shown here: (All figures voltages unless noted otherwise)

#### dB Attenuation

0	2.6	3.0	3.4	4.6	3.5	4.5	.55	0
3	2.4	2.8	3.2	4.3	3.2	4.2	.3	1.1
6	2.2	2.6	2.9	4.0	3.0	3.8	.25	+2
12	1.8	2.3	2.5	3.4	2.6	3.3	.1	+5
20	1.0	1.7	1.9	2.7	2.0	2.7	+2	+8

Now, when you note a signal change, you can approximate the difference. For example, if signal level is normally +0.2 volts but increases to 0, you have seen a 6 dB change, or 100% increase. If signal strength increases from -1.0 to -2.5, you fudge a little and determine that increase was between 12 and 20 dB from column one. For those who've missed previous VUL articles on dB, a 3 dB increase means 50% more signal, 6 dB is 100% more, 20 dB 10 times more. Conversely, 20 dB loss is 1/10 of signal left, etc.)

#### METER USE

**TRAPS:** You'll get the most out of Jerrold, Channel Master, or just T-line traps with the meter. True, you relate the trapped channel to numbered dials on the CM, but this isn't enough. Jerrold types require some fishing. I've missed many an ID because I was too lazy to recheck and reset the traps for maximum attenuation. You can't necessarily set and forget these traps. They must be checked often as TV oscillator drift due to heat or voltage variation is common. Sometimes vibration causes trap misadjustment, especially with the Jerrold types.

When trapping the video carrier, always set the trap by tuning on the channel you want trapped. That is, select channel to be trapped and tune for maximum attenuation. Tuning by watching the tube isn't that accurate, unless you can completely eliminate the local. Trying to tune out my local channel 4 while monitoring a channel 3 E-skip station that is changing signal level almost constantly is impossible. Of course, if you have no meter, you must tune on the adjacent channel, since it's hard to determine just where maximum attenuation is on the local channel. (Much of this might seem strange to you lucky DXers who live in DX paradises; that is, areas with no local VHF stations within 20 miles. But trapping or filtering is really necessary if you want a good station total but are located in a metropolitan area. It's bad enough that you generally can't get DX through a local 10 miles away, but losing the adjacent channels too is ridiculous.)

**ANTENNAS:** Due to the wide beamwidths of most antennas, the meter seldom helps in aiming one. You can see the results on the tube. However, I have found the meter helpful when aiming the 7-foot JHF dishes because of their sharp beamwidth and the poor 10-degree movements of my Alliance U10C rotor. Sometimes the station peaks between notches on the rotor dial.

Polar plots of antennas can be made using the meter. From this you can compute front-to-back ratio, front-to-side ratio, directivity, etc. You might even have some fun by checking how near actual gain (versus a reference dipole), F/B ratio, etc. really are when compared to the claims. If antenna specs are received, they often give the "best case" rather than the "worst case" condition. Thus, an all-channel antenna with claimed F/B ratio of 25:1 might well have 25:1 rating on channel 10, for example, but on channel 2 or 13 it might be 1:1!

**OTHERS:** Obviously, preamp gain can be seen by reading AGC voltage with and without the preamp connected (I mean disconnect the preamp; don't just turn it off!). Such attached gear such as the Interdigital Preamplifiers (IDAs) can be tuned for maximum gain and filtering by using the meter. Rapid knob rotation to calibrated channels will get you in the ballpark, but the meter will allow optimum results. Sometimes the desired weak signal is between two very strong locals. In this case, it might not be best to use the meter, since off-tuning slightly will cause a bit of adjacent channel slop and, therefore, meter indication.

Insertion loss of converters, traps, 75 or 300 ohm connectors, etc. can be detected with meters. However, unless your meter is calibrated to detect small or larger (5 to 1%), all you can do is approximate the loss. Often, VLF loss going through a converter is 5 to 7% on some channels, as high as 25% on others.

#### FOR FM DXERS

The "uses" section applies to FM DXers also. In fact, AGC voltage through an amplifying network is used to drive most S-meters on FM receivers. I haven't emphasized external meters for FMers because almost all good receivers have S-meters. Do not confuse the tuning meter with S-meter. Some so-called high quality receivers have offered tuning meters only. Truly excellent tuners and receivers offer both. You need both: the tuning meter for exact tuning on strong local signals that pin the S-meter (non-DXing) and the S-meter for DXing.

S-meters on FM receivers probably follow the ham philosophy, where numbers or dots indicate 6 dB changes (100%), except at the ends. That is, between 0 and the first dot (or number) and the last number and upper end, change is greater and usually exponential. Above the last major mark, you usually refer to so many S units above 9. Unfortunately, built-in S-meters often suffer either because you can't tell changes in weak signals adequately (the needle barely moves) or because the needle pins at maximum with only a mildly strong signal. In the latter case, you can always add an attenuator just to get signal indication within the limits of the S-meter.

You can calibrate your meter against an FSM, also. To compare the readings of two "identical" receivers is tricky, however. Component tolerance, especially because of the unpredictable transistor characteristics, might produce a big S-meter reading difference even if signal received by the tuners is identical.

Use of an S-meter for TV or FM can only add, at least a little, to the DXer's totals or pleasure in the hobby. Everyone with a usable VOM or VTVM should give it a try and judge its use.

#### ATTENUATORS, PADS, ETC.

The textbook definition of an attenuator is a group of fixed and variable resistors used to reduce the strength of audio and radio frequency signals by a desired amount. Attenuator ohmage (impedance) should match the circuit to which it is connected so as to produce very little distortion. Since these devices are purely resistive, they attenuate both high and low frequencies.

A non-adjustable attenuator is correctly called a "fixed attenuator" or "pad." However, I often hear people call any pad an attenuator. Rather than get into a hassle over semantics, the items discussed here will be called pads if they are non-adjustable, and attenuators if they have the provision for switching to two or more attenuator values, or if they are continuously adjustable.

#### USES

**TV OVERLOAD:** If the radio frequency (RF) or automatic gain control (AGC) circuits of a receiver are incorrectly designed, overload on the desired channel is common in strong signal areas. An overload can produce one or more of the following: (1) extreme contrast, (2) severe distortion, (3) audio buzz, (4) horizontal and/or vertical roll. Simply, the signal is amplified more than one or more amplifying stages can handle. (Applying excessive input voltage to an RF amplifier often changes important operating parameters of the device.)

Typically, inexpensive portables suffer from overload. Some have local/distant switches in the AGC circuit, but even in the "local" position, overload is common in strong signal areas. A serviceman might clip a pad between antenna and receiver to reduce signal. Hopefully, no TV DX enthusiast has this problem.

**CROSS-MODULATION:** Any two signals (A and B) beating together in a tube or transistor can produce (1) the original A and B signals, (2) A + B, or (3) A - B. This process, called modulation, when intentional produces a process vital to most radio equipment. However, undesirable cross-modulation or cross-mixing CM, can occur if many high energy signals arrive at a mixer or an amplifying device. What happens is that the device loses its ability to amplify (if an RF amp) or modulate the desired signals (intended signal and local oscillator). The device literally quits because of the mass of input, the result being modulation of several signals. On FM, you might have Bach and rock; on TV, you might have Kojak chasing a thief and Charlie's Angels.

CM process is a function of many things: gain, selectivity of tuned circuits, physics of mixer or amplifier, etc. In fact, two identical FM receivers fed by identical antennas can produce different CM when tuned to identical frequencies, depending upon the nonlinearities of various receiver stages. Many members have the false idea that transistors alone are responsible for CM. This isn't entirely correct. True, transistors are small-signal devices, and early versions of these could not handle large signal levels. Consequently, when solid state FM receivers first appeared some years ago with conventional RF transistors, CM was a major problem. The cause was a combination of (1) high stage gain, (2) rather broad coil-capacitor tuned circuits, with respect to 0.2 MHz channel width, that permitted considerable voltage pickup from stations other than the one desired, and (3) low signal handling ability, compared to tubes, of these early transistors. The transistors alone were not at fault. To illustrate my point, a close friend and once very active and successful 6-meter ham once purchased an elaborate tube-type 60 line communications receiver intended for government use. He paid a few hundred dollars, although



the original cost was about \$2000. In addition to double or triple conversion, bandspread that spread a MHz over about 20 feet, etc., a high gain dual-RF stage was used. He got quite a bit of CM (not images) due to local AM stations in the 5 to 10 mile range, and these were not 50 kw!

Improvements in field effect transistors (FETs), both metal oxide semiconductor (MOSFET) and the junction (JFET) types, however, reduced most CM problems. These devices had noise figures equal to or better than the best tubes, and could handle larger signals better than conventional transistors. Gain, however, was modest at best, but often two FETs were used in RF design for added gain over tube types.

Yes, you'll still get plenty of CM with a FET type FM receiver if you point your high-gain FM DX array at several high-powered locals a few miles away, primarily because of poor RF selectivity (coil/capacitor) which still exists in many receivers. Readers should not confuse RF section selectivity with intermediate frequency (IF) selectivity. Heath made the major leap some years ago by replacing unselective coil/capacitor tuned circuits with crystal filters in the IF of the outstanding AR15 FM receiver. This made IF selectivity better. Though crystal filters are now in more common use, RF selectivity still needs improvement. Odds are that FETs will improve to a point where CM is eventually no problem at all. We shall see.

What all this means is that if CM makes your receiver go crazy, the easiest solution is to connect an attenuator. True, all signals are reduced, but the DX station might still be strong enough to ID, whereas otherwise it would have been lost in the CM. The trick is to determine just how much attenuation you need to eliminate the worst case of CM, then connect pad as needed. Of course, if only one or two stations cause CM, you can trap them. But traps will also trap FM stations several MHz away. If you're "surrounded" by several high-power locals that cause CM in several directions, an antenna with high F/B and F/S ratio plus an attenuator are needed. Or, you'll have to wait for the locals to sign off!

For TV, CM seldom occurs, especially in tube models, because of the less "total" voltage pickup from locals (fewer TV stations in 10-mile range). However, the previously described rules apply.

**PREAMPS:** The same overload and CM problems that plague TV and FM receivers are more common with preamps, especially non-tunable broadband types. The tuned circuits here are "flattened" so they accept signals across the band. This enhances CM when these are used in strong signal areas.

Tube models suffer less from IM than transistor types since manufacturers have been slow to use state-of-the-art devices, though this has improved in recent years. However, I remember well purchasing a Winegard Twin Nuviator tube type VHF preamp many years ago that "could not possibly overload under the severest of conditions," the ad claimed. Tried out in my Milwaukee site, it had CM and overload problems in almost every direction! Also, since the gain was low anyway (and most important, the noise figures were no better than that of my RF amplifier in my Zenith TV), the device helped very little when tried before locals signed on. Exit one preamp to my bulging junk box!

If overload and CM are common with your preamp, you can: (1) live with it, (2) switch it in and out (though with a mast-mounted type), or (3) add an attenuator and pad. Even if attenuation is greater than amplifier gain on some channels, you might benefit if the noise figure is improved, i.e. lower, or if the preamp is narrow-band. Sometimes a little attenuation between amplifying devices in series will eliminate interaction, overload, or CM.

**MEASURING:** With an S-meter and attenuator, you can measure gains and losses. Gain of a preamp, for example, can be computed for a given channel by noting signal increase when preamp is connected, then adding attenuation until signal drops to what it was before the preamp was added to the system. The amount of attenuation equals preamp gain. Similarly, gain, front-to-back ratio, front-to-side ratio, and directivity differences of antennas can be measured. For gain, rotate each antenna toward station and note differences in signal. Add attenuation to equalize signals and compute the gain differences. Exact antenna gain can be computed by building a dipole or folded dipole (described later).

#### PADS AND ATTENUATORS: BUY 'EM

Most MATV/CATV suppliers offer several types of 72 ohm and 300 ohm attenuators. Costs vary with frequency range, steps of attenuation, construction, etc. Your best bet here is to consult the major MATV/CATV and electronic supply catalogs. Don't think that MATV/CATV devices will always work better than commercial types: both Bob Cooper and I have noted poor contact on some MATV/CATV slide-switch types, for example.

Professional, multi-switch position types can be far more expensive. However, you might look in surplus stores, hamfests, and other "gathering places" for used electronic gear, which traditionally have been good sources for such devices. Some DXers have obtained professional type pads, attenuators, and the like very cheaply with a little "hunting." If possible, try to locate any devices with connectors that match your equipment (BNC, UHF, F-fitting) if you have a 72 ohm system with preamps, traps, patch system, or other devices with similar impedance. If you find such items at a discount price, you've really discovered a DX "bargain"!

Incidentally, anyone with an average-sized "junk box" should be able to build a few pads easily. I'll discuss this further when the series continues next month.

# EASTERN TV-DX

Bill Thompson  
1907 Seneca Street  
Buffalo, NY 14210

October 1977

Deadline: 10th

May B-skip dates:	3	5	6	7	9	11	12	13	14	15	16	17	18	19	20	21	24	28	29
number of reporters	1	3	2	15	4	5	9	2	9	7	5	2	4	3	6	10	1	1	6
MUF reported into; ch	3	3	2	FM	4	6	4	4	5	5	6	2	6	4	6	5	4	2	4

30	31	June:																						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
18	8																																												
FM	5																																												

23	24	25	26	27	28	29	30
15	11	11	13	9	6	9	10
FM	FM	FM	FM	FM	5	4	FM

By mid-August, most Es activity had ceased—but for the first week or so, it was beginning to seem like the skip season was getting started all over again in some areas. Nevertheless, the season tapered off to a close more or less in a normal manner. Many reporters who saw Es on August 3rd considered that day to be the last truly "super" days of the Summer season, with an apparently unusual amount of short skip noted by some—and of course, high MUFs—which seem to have been the most impressive factor of this unusual season. The Es chart above tells much of the story itself; there wasn't one day in June when B-skip was not reported. Also, on even the worst June skip days, the MUF did get up to at least channel 4. Next month, the Es chart for July and August will be run. There's a lot more recent and newsworthy information to catch up on this month, mainly about tropo. In wide areas of eastern North America, there was a distinct lack of tropo in August. In many areas of the U.S. Midwest and Northeast, August was unusually rainy. Most areas experienced some periods of good tropo in that month, but in general, it was a washout—no pun intended. In the Great Lakes area of the Midwest, there was some excellent late August—early September tropo; and in early September, some impressive ducting was reported. Take for example the fine coastal catches reported on UHF at over 500 miles by Philadelphia DXer Richard Eckman. Bill Draeb also reports some fine catches from over 600 miles to central New York and northeastern Pennsylvania on September 3rd and 4th, and to Nebraska on the 5th and 6th. But even for a super-DXer like Bill, there hasn't been any 900-mile or beyond ducting yet this year. Mid-September weather in many areas is very poor as this is being prepared, so unless things change drastically soon, there won't be much of anything interesting tropowise. There appears to have been almost no activity as far as meteor scatter goes; the Perseids shower in mid-August was not very prominent to those of us who watched for bursts on TV and FM.

Bill Hopburn 5659 Highland Avenue Niagara Falls, Ontario L2G 4Y2 (EDT)

May					5	Es	0828	KLNB-3	NE	1075	9	Es	1250	KMTV-3	NE	875
27 Tr	0820	WVIZ-25	OH	165				KTIV-4	IA	880			1646	KDIX-2	ND	1185
30 Es	1540	KARD-3	KS	1030			0955	KCKT-2	KS	1075	12		1142	WFT-2	IA	755
		KCKT-2	KS	1075				KARD-3	KS	1030			1159	KMTV-3	NE	875
		KMTV-3	NE	880			1711	CKCK-2	SE	1355			1753	WNT-2	IA	755
	1630	KMTV-3	NE	875			1729	KYUS-3	MT	1340	14		1400	KFOX-3	TX	1220
	1659	MUF	ch	6			1803	KKOS-3	SE	T			1534	KDIX-4	TX	1200
	1705	KLNB-3	NE	1075	6		1600	KCKT-2	KS	1075			1603	ads	2,4	with
	1737	KUSD-2	SD	880				KMTV-3	ND	855				same	programming	&
	1759	KDIX-2	ND	1185			1635	KLNB-3	NE	1075				ads	as KFOX-3!!	
	1848	KOTA-3	SD	1205				KARD-3	KS	1030	20		1815	WESH-2	FL	970
	2029	MUF	to	ch	6		1759	CBFT-3	NE	1000			1823	WEAR-3	FL	980
31 Tr	0740	WJHX-2	MI	205			1810	KMTV-3	NE	875	21		1230	WEAR-3	FL	980
		WJX-4	WYFZ-7				1813	KUSD-2	SD	880	22		0942	KARD-3	KS	1030
		WJIM-6	MI	T			1826	KTIV-4	IA	880			1022	KLNB-3	NE	1075
		WJRT-12	MI	T			1900	KOTA-3	SD	1205			1032	KYCO-5	WI	1335
		WOTV-8	MI	T			1929	KDIX-2	ND	1185			1039	KCKT-2	KS	1075
		WILL-10	MI	T			2000	WCCO-4	MN	725			1056	KRNB-6	NE	1150
June							2030	KPFO-6	SD	1035			1105	KYUS-3	CO	1255
5 Es	1632	KARD-3	KS	1030	8		1920	WEDU-3	FL	1065			1206	KWGN-2	CO	1365
		KCKT-2	KS	1075			1953	WEAR-3	FL	980	24 Tr	0816	WTVS-56	MI	205	
	1700	KLNB-3	NE	1075			2006	WREL-3	GA	800	July					
	2100	KOTA-3	SD	1205	9		1236	KDAL-3	NE	690	5 Es	2000	KIII-3	TX	1485	
4 Tr	0727	WUTR-20	NY	200				KDGO-3	SD	905	7	1745	CKCW-2	NE	755	
	0738	WBYI-25	MI	245				KPFO-6	SD	1035				CBRT-3	KS	785

"It seems that the skip season has really been rolling...From my location, and with my equipment, it seems that this is a lousy season for tropo. May was normal, but so far June and July have awarded me nothing. Farthest tropo so far this year is still WUTQ-8 Detour, MI at 315 miles on May 13th. A good opening developed on the morning of May 31st, but unfortunately I could only ID the Detroit stations, but none of the farther channels 6, 8, 10, and 12. Hope tropo gets better soon. I'm satisfied with the skip. 73s and good DXing."

John F. Combs 2485 Ivan Ct. Orlando, Florida 32807 (BDT)

July		22 Es	1745	WGR-2 NY	30 Es	1828	XHD-4? Tams	T
6 Es	1800	unIDs 2-4		Buffalo 1006		1949	XHTV-4? DF	T
7	1135	"CCI chs 2, 4"		WERN-4 NY 986		2017	XHF-3? YUC	T
8	0820	KQTV-2 MO 1089		CKGN-2? OH T	31	1813	"CCI ch 2"	
	0825	KTEW-2 OK 1006	1751	CBOT-4 OH 1205	August			
	0828	KARD-3 KS 1129	1754	WPSX-3 PA 856	2 Es	1300	WTMJ-4 WI 1069	
	0947	KCMO-5? MO T	1803	WSEB-3 NY 1036			WISC-3? WI T	
		WDAF-4? MO T		KYW-3 PA 868		1405	CHFD-4? OH T	
		KTVO-3 MO 1039	1806	WPVI-6? PA T		1415	WFRV-5? WI T	
		KATC-3 LA 670	23 Tr	0030 WALA-10 AL 415		1433	WBAY-2? WI T	
	0950	KMOX-4? MO T		0031 unID-7 NBC	3	0948	WKAQ-2 PR 1184	
	0955	KHLO-3? IA T		0035 WEAR-3 AL 401		1004	WAPA-4 PR 1184	
	1000	Tele-Rebelde-3 CUBA		0040 WKRG-5 AL 417		1016	WORA-5 PR 1161	
		Holguin 615		*Pensacola FM in on		1027	KQTV-2 MO 1089	
		Tele-Rebelde-5 CUBA		Panasonic portable!"		1043	HISD-4? D.R. T	
		Santiago 665	Es	0958 unID-2		1124	WNEB-5? MI T	
	1006	ICR2-2 CUBA 665		1630 unID-2			WTOM-4 MI 1195	
	1030	KMTV-3 NE 1209	27	2250 t/in		1143	CKVR-3 OH 1096	
	1038	KCKT-2 KS 1209		KFSM-5? AR T			WKZO-3? MI T	
	1043	KENS-5? TX T		KTEW-2? OK T		1145	CHNB-4? OH T	
	1055	unID-5 "RTC"		KTVY-4 OK 1059		1151	CKCO-2? OH T	
	1100	KMOL-4 TX 1025		KARD-3? KS T		1228	WTMJ-4 WI 1069	
	1102	KWAB-4? TX T		KOTV-6? OK T			KQTV-2? MO T	
	1104	XHAB-5? Coah T	29	1530 KTVY-4 OK 1059		1230	KTVO-3 MO 1039	
	1107	KRIS-6? TX T		KDFW-4? TX T		1530	unID-2 Spanish?	
	1138	XHD-4? Tams T		KFDX-3 TX 1078		1700	WPTV-4? IN T	
	1200	KTVY-4 OK 1059		KTEW-2? OK T			"MUF ch 6 phs"	
	2007	unIDs 2, 3		KKAS-5? TX T		1709	WCVB-5? MA T	
9	1500	"CCI ch 2"	1546	KETS-2? AR T		1730	WNEB-5? NY T	
	1900	"CCI chs 2, 3"	1550	KOTV-6? OK T		1731	WNBC-4 NY 942	
11	1055	unID-2 CCI	1652	CKCO-2? OH 1133		1750	"had to leave"	
21 Tr	2255	WCTI-12 NC 508	1700	KQTV-2 MO 1089	4	1015	unIDs 2-4	
		WITN-7 NC T	30	1300 "in, but was busy"		1020	KARD-3? KS T	
	2300	WJWJ-16 SC 290		1617 X--- 4 YUC 800?			KTEW-2? OK T	
	2305	WRJA-27 SC 373		TGV-3 GAT 1155		1024	KTVY-4 OK 1059	
		WTVB-17 NC T		YSR-2? R.S. T		1628	KPRC-2? TX T	
22	0600	WTOG-11 GA 242	1632	KGBT-4 TX 1023			KBTX-3 TX 910	
	0655	WFSU-11 FL 230	1727	KRGV-5 TX 1020		1630	KJAC-4 TX 767	
		WJHG-7 FL 274		X--- 5 YUC 800?		1633	KIIL-3? TX T	
		WNBB-13 FL 263		Merida "(Net13)"		1634	KPDM-6? TX T	
		WBCA-27 FL 221	1823	KIIL-3 TX T				
		WYRA-38 GA 341		KRIS-6 TX T				

"The E-skip continues, though not as frequently as May and June. My VHF antenna will definitely be the rabbit ears—I have found that the Archer antenna I have is almost not even worth erecting, the reception on it is so lousy. I do finally have a working UHF system, though. Instead of the stacked 4-bays I had at my old QTH, I have a single antenna driving an AC-4990. It's about 5 feet higher than I had at the other house, so it'll be interesting to compare results...Has anyone else noticed the current trend of NBC-affiliated stations to run ID slides consisting of a large channel number, a huge NBC logo, and sub-microscopic call letters?? I've seen many by Es that are doing this and it is getting extremely frustrating."

Paul D. Traska 64 Weaver Avenue Buffalo, New York 14206 (BDT)

August		31 Tr	1100	WUCB-19 MI	2 Tr	0030	WPMZ-69 PA	
12 Es	1930	KATC-3 LA		WKAR-23 MI		1535	WVNT-53 VA	
	1957	KTBS-3 LA	September				1200	WLKY-32 KY
	2000	KXAS-5 TX	1 Tr	0050	WEZF-22 VT	3	1230	WKYT-27 KY
28 Tr	0030	WCDC-19 MA			Burlington		1235	WKMR-38 KY
	0035	WKBS-48 PA		0230	WJZ-13 MD	4	1209	WYYI-25 MI
		WLVT-39 PA		0231	WTTG-5 DC		1210	WHMB-40 IN
30	1230	WJNL-19 PA		0246	WRC-4 DC		1211	WLFI-18 IN
	1235	WOPC-38 PA			Washington		1212	WICD-15 IN
	1300	WHP-21 PA		0305	WCAU-10 PA		1219	WFTI-20 IN
		WTPA-27 PA		1600	WLVT-39 PA		1230	WHIT-34 IN
	1535	WUOC-44 OH		1606	WDCA-20 DC	8	1900	WFLD-32 IL
31	0010	WNU-16 IN		1607	WSBA-43 PA			WSNS-44 IL
		WANE-15 IN		1850	WVNT-53 VA			WFCO-38 IL
	0115	WYYI-25 MI		2120	WETA-26 DC			WCTU-26 IL
		WUHQ-41 MI	2	0020	WPHL-17 PA		1930	WCAB-50 IN
	0118	WPHL-17 PA		0027	WTAP-29 PA		1955	WUHQ-41 MI

Ken Simon 528 Pilgrim Road West Palm Beach, Florida 33405 (EDT)

June	29	Es	2000	KDPW-4 TX	6	Tr	2013	unID-33 CGI
28 (continued)				MUF to 88.5			Es	1810 WKYC-3 OH
Tr 0803	WBNS-42 AL		2100	KPRC-2 TX	12			1742 unIDs 2, 3, 4
	Birmingham	July			13			0646 unIDs 2, 4
0815	WOLO-25 SC	T	1	Es	1715			unIDs 2, 3, 4
	WHDH-18 AL				1730			KPRC-2 TX
0830	WRJA-27 SC							KIII-3 TX
	WFTV-30 GA							KATC-3 LA
0855	WABW-14 GA				1814			KMDL-4 TX
	WDCO-15 GA				1901			KIII-3 TX
	Goehran	2			0940			unID 2-4
	WACS-25 GA				1500			unIDs 2, 3
1806	W69AA-69 FL				1730			WPSX-3 PA
2124	WKBA-14 SC				1802			KJW-3 PA
	WRJA-27 SC				1900			WTAB-4 PA
	WRXK-35 SC	3			1000			HQTV-2 MO
29	0413				1832			WKYC-3 OH
	PIVY-4 AL				1835			MUF 107 MHz
	Bothan				1933			CKGH-6 OH
	"too bad I had to				1924			unIDs 2, 3, 4
	be at work at 0500"	6			1930			WPSX-3
	Es 1900 unIDs 2, 3				Tr 1955			WRJA-27 SC
	2000 KTBS-3 LA							
								1030 unIDs 2, 4 CGI

"Not too much on TV...no sign of ZNS-TV (Nassau, BAHAMAS) that signed on in 2nd week in July...Probably due for a tuner overhaul here...73's etc."

Thomas J. Xingling, Jr. 221 Pinewood Road Baltimore, Maryland 21222 (EDT)

May	12	Es	1400	unIDs on 3	6	Es	2000	MUF to 98.3
18	Tr	0730	WYAH-27 VA		14		1250	KFTV-3 MO
		2100	WULF-39 NC					Cuba-3
			Wilmington					to WLBT-3 MS
		2130	WUNK-25 NC					KMTV-3 NE
20		0740	WNET-36 NC				2000	MUF to 107.1
		0800	WCCB-18 NC		21		1900	MUF to 103.1
			Charlotte		26		1800	MUF to 91.3
		0815	WANC-21 NC	T	30		1700	MUF to 103.3
		0830	WRDU-28 NC					July
21		0230	WNEH-8 CT	1	Es		1700	WOI-5 IA
June								to MUF to 103.3
3	Es	2000	KATC-3 LA				2100	WCIX-6 FL
4		1800	unIDs to 91.3	2			1730	WBAH-3 FL
5		2100	KTBS-3 LA					KPDZ-3 TX
		2130	WTVJ-4 FL					to KIII-3 TX
6		1500	KATC-3 LA					KATC-3 LA
		1700	KHLO-3 SD				2100	MUF to 98.3
			KPLO-6 SD	3			1000	WRDU-3 FL
			WDAY-6 ND				1100	WCIX-6 FL
			to CBWFT-3 NB					MUF to 104.7
			CHFT-6 NB	4			1700	MUF to 98.7
			WABG-6 MS	6			1800	WREG-3 TN
			WCBT-4 MS					Memphis
		2130	MUF to 97.5					WCIX-6 FL

"Lot's of skip in at last! I DX the FM more than TV when skip is in. I was quite surprised to get Canada on UHF-TV. Steve West gave me a call about the tropes when he had Ohio, and then I found that Canada was in."

Randall Clark West Virginia Rehabilitation Center Box 325 Institute WV 25112

At Parkersburg WV:	7	Es	2314	KBTX-3 TX	19	Es	1049	KROP-2 NB
May								July
5	Es	2108	"Cuba CGI oh 2"	11			2158	KWGH-2 CO
6	Tr	1800	"All or most OH & PA stns in, including some above 62!!"	12			1500-2300	unIDs
				30	Es		1200	WBRZ-2 LA
				June				
7	Es	1536	WPRF-2 FL	5	Es		1100	WBRZ-2 LA
		2024	KWGH-2 CO					At Parkersburg WV:
		2040	KWGH-2 CO	11	Es		1430	KPRC-2 TX
		2129	WDHQ-2 AL				1515	unID-2 CUBA
				19			1028	KWGH-2 CO
								At Institute WV:
							8	Es
							2000-2300	"mild"

"Still no confirmation on that July 3rd ch 8 Es report as I'm not sure of the precise calls seen, etc...saw a 8 beat station over WCHS..."



Harry J. Hayes Star Route Box 226c Gouldsboro, Pennsylvania 18424 (EDT)

June	2 Es	1100	unID 2-6 FL	21 Es	1310	KARD-3 KS	15 Tr	2030	WHAG-25 MD	155
		1200	WEDU-3 FL		1319	KQTV-2 MO		2045	WBOY-12 WV	
		1230	WBTW-3 NC		1625	WMAB-2 MS			Clarksburg	280
		1715	"Intense Es 2-6 to Maritimes"	23	2059	WESH-2 FL			WPX-3 PA	150
3	0900	CJOX-3 WF	26	1600	WMT-2 IA		2330	WHP-21 PA	"on ch 9 yagi"	
	2100	KEFS-2 AR		1630	unIDs 4 & 6			WTAJ-10 PA	155	
5	0905	"Intense Iowa"			"ATV net"			Harrisburg	90	
6	1933	KDAL-3 MN		1700	KLNB-3 NE			"no sign of 27 or 33"		
	1935	WDAY-6 ND		1928	WMC-5 TN	16	2100	WPHL-17 PA		
		Fargo			Memphis			Philadelphia		
	2000	KBIR-6 "???"	30	1505	CJCH-4 NF			WTAF-29 PA		
		(KBIR-6 MF -bt)		1700	WCHI-4 MS			Philadelphia		
		KTCA-2 MN		1835	"intense thru channel 6"			WLVT-39 PA		
8	1903	CFWPT-3 ME						WKBS-48 PA		
		KTBS-3 IA						Philadelphia		
	2000	WMAB-2 MS	July	1 Es	1925	WPTV-5 FL	26 Es	2000	KHAS-5 NE	
		KDAL-3 MN			1928	WUFT-5 FL		2130	KHOS-6 MO	
	2015	KTVI-2 MO			1931	KFDM-6 TX			Sedalia	
	2100	KGFB-2 ND	3	2030	"Intense 2-4"		27	2100	WDSU-6 LA	
		Grand Forks	6	1900	"Intense 2-6 to MS, MO, LA"		28	1500	KCMO-5 MO	
9	1230	KDLO-3 SD						1502	KQTV-2 MO	
	1310	KFYR-5 ND	7	1730	"Very intense 2-5 to Maritimes to 2000"		29	1725	KDLO-3 SD	
		Bismarck						1730	KTCA-2 MN	
	1323	WDAY-6 ND						1733	KMPV-3 NE	
12	1100	WMT-2 IA		1800	CBHT-3 NS	31	1700	WOI-5 IA		
	1800	KGFB-2 ND		1830	CJCB-4 NS			Ames		
	1900	WDAY-2 WI		2000	CBHT-5 NS			1725	WOWT-6 NE	
20	1730	KTEW-2 OK						1728	unID-7 "skip up to here briefly"	
	1735	MUF ch 6	15 Tr	1005	WUTR-20 NY			1800	KHAS-5 NE	
	1800	WNGE-2 TN			Utica	140		KCMO-5 MO		
		Nashville		1050	unID-7 NBC			1830	KQTV-2 MO	
	1830	WTVJ-4 FL			WROC-8 NY	175		KCKT-2 KS		
		WPBT-2 FL		1101	WETS-9 NY	140		KARD-3 KS		
	1900	KFSM-5 AR			"thru WOR-9 NY"					
21	1230	KMOX-4 MO		2030	WNPB-31 MD					
	1310	ECKT-2 KS			Hagerstown	155				

"I have a strong suspicion that the NBC news station on ch 2 at 1835 on 7/7 was WLBZ-2 ME because Richard Eckman of Philadelphia got a positive ID on them at 2000, I believe, on that date. Complicating matters was that Florida skip started in on FM after 2000, so possibly FL skip was in on ch 2 at 1835. Since I use rabbit ears I could not tell directions...at the beginning of the opening around 1800 I had French stations on 2 thru 4 with mentions of Quebec. I have not talked to Mr. Eckman directly about this as yet so my information may not be too accurate as far as times are concerned. (See report on next page -bt) What was interesting about the Maritimes opening of 7/7 was first of all the intensity of the thing, which rarely got above ch 5 (at 1852 French was heard on 93.5) and secondly the amount of 'short skip' on low channels. It's widely believed that the more intense a skip opening becomes, the shorter the distance becomes. Can some of the experts elaborate on this further? Is short skip the result of multiple clouds in a relatively small area which bounce signals back and forth to each other? (In other words, is it plausible to assume that in this opening a cloud was over Connecticut, say, and that cloud intercepted ch 2 in Maine, and bounced it to another cloud which was over, say, Massachusetts, and thus a more favorable refraction angle for my area, and relayed it here that way?) Or is it the result of direct refraction from a close cloud for some reason? I know no one knows for sure the mechanics of skip, but I would be interested in hearing some conjecture on this. (I don't think short skip is as complex as you propose. All the research material I've read on it indicates such short skip is the result of either one very intense cloud (causing unusually short paths due to the very steep angle of refraction that will result from such a cloud) or two close Es clouds on the path, neither one of which would be able to give you such short skip by themselves. When there are two Es clouds in a single path, the signals travel from transmitter to cloud, to the second cloud, and from there to your location; but I've never heard of signals changing direction 180° twice within a single path, as a ME-to-CT-to-MA to PA path would call for! Any comments from the propagation experts in WTPDA would be welcome -bt) That skip seen on ch 7 on 7/31 lasted about 45 seconds. Skip reappeared at 1735 for a few seconds. 73"

October 1977

Brian L. Cartwright 106 Leila Street Johnstown, Pennsylvania 15905 (EDT)  
 \*This is my first report as I have just joined. My receiver is a 1963 Zenith  
 23" B/W with 2 wire antennas, one E.- S., one E.- W. Season started for me  
 night of June 5 with tropo reception of WTTG-5. June 6 and July 5 were out-  
 standing, as well as July 31. Last night I couldn't get KDKA on CATV because  
 of KCKT CCI. Others seen besides KCKT on the CATV are KNOP-2, Cuba-3, WEDU-3,  
 WBRZ-2. I also have tentatives on KTVS-3 and KUSD-2, couldn't find record of  
 dates. Log at 87, 23 USA, 4 Canadians, 1 Foreign."

June	5 Tr	2300	WTIG-5	DC	140	5	Rs	2335	KTBS-3	LA	1000	27	Rs	1300	KFTV-3	NE
	6	1658	KTIV-4	OK	1060	7		1400	KARD-3	KS	1000			1856	WSB-2	GA
		1722	KTCA-2	MN	800			1630	WCSH-6	NE	510				MUF	ch 3
		1815	WTVJ-4	FL	1000			1648	CFCE-4	QB	600			1900	WDIQ-2	AL
		1816	WPTV-5	FL	970			1700	CHAU-5	QB	880			1902	WRFL-3	GA
		1830	WEDO-3	FL	890			1707	CHSJ-4	NB	700			1930	MUF	ch 2
			WPBT-2	FL	1010			1710	CHPE-6	QB	690			2000	WESH-2	FL
		1842	KATC-3	LA	1030			1720	CJCH-5	NS	800			2025	WPBT-2	FL
		1900	WGBI-4	MS	720			1735	CJHR-3	QB	780			2030	WEDO-3	FL
		1903	WBBZ-2	LA	990			1740	CHFT-2	QB	450			2057	KPRC-2	TX
		1910	WKRC-5	AL	860			1742	WBBZ-2	NE	610			2130	WHRZ-2	LA
		1914	KTEW-2	OK	980			1751	CKCA-2	NB	790				MUF	ch 3
		1932	WEAR-3	FL	860	8		1800	CHCE-4	NS		28		1200	WHS-2	FL
		1946	WFL-4	LA	990			1300	CHDB-3		1330	29		1702	CHFT-3	NS
								1305	WEDU-3	FL	890			1826	KPRC-2	TX
17		1100	WPBT-2	FL	1010	25		2335	CKPR-2	ON		31		1200	WJIT-4	FL
		1630	WTVI-4	AL				2358	KDAL-3	MN				1828	KHFL-4	NE
July						26		1900	CHCI-2	ON				(call now KSNB	-bt)	
1	Rs	2030	KCMT-2	KS	1050			1902	WMT-2	IA				1859	KNOP-2	NE
		1900	WABO-2	IN	460			2100	KCMT-2	KS					KCMT-2	KS
3		2320	KPDY-3	TX	1150	27		1130	WESH-2	FL						

Steve West 432 Kennore Road Havertown, Pennsylvania 19083			(215)449-1472		
<u>June</u>			<u>July</u>		
4	Es	1800 WPBT-2 FL	6	Es	1920 unID 2-6
5		0845 KTCA-2 MN	7		1200 WESH-2 FL
					1230 ICR6-3 FL
		1000 WOI-5 IA			1700 CBSJ-4 NB
					St John 600
					27
		1700 KQTV-2 MO	11	Tr	2130 WLVI-56 MA 275
6		1000 WMAB-2 MS	12	Es	1100 KQTV-2 MO
					1800 KETS-2 AR
		2200 WDIQ-2 AL			KALB-5 LA
8		0845 WKRG-5 AL	14	Tr	2243 WUAB-43 OH
9		1900 WPBT-2 FL			Cleveland 360
10		1845 OKPR-2 OH			WBNY-36 NY 180
12		1200 KTCA-2 MN			WSKG-46 NY 160
		1700 WPBT-2 FL			WBJA-34 NY 160
14		1330 unID 2,4,5			CKGH 22-22 OH
21		2000 unID 2-6			Urbridge 350
27		1030 WESH-2 FL			GBLPT-25 OH
					Toronto 340
		WJIT-4 FL			WAKR-23 OH
		WPBT-2 FL			Akron 350
		1130 WKRG-5 AL			WJAC-6 PA 200
		KPRC-2 TX	15		0230 WYTV-33 OH 300
28	Tr	2245 WUNK-25 NC 320			0700 WPGH-53 PA
		2330 WYTH-7 NC 320			Pittsburgh 250
		WCTI-12 NC 350			2300 WMBG-26 ME 340
30	Es	1700 KTVI-2 MO			
			<u>August</u>		
			1	Es	1000 WMAB-2 MS
			3		1230 KHAS-5 ME
					1300 KCKT-2 KS
					KDPW-4 TX
					WBAP-5 TX
					(now KXAS -bt)
			4		1900 unID-2 "LA"

"The TV skip hasn't been very exciting, only two new ones logged. This may be due to FM DXing though. The trope on 7-14 to Ohio and Ontario was hard to believe; that area is hard to receive over the mountains, but there they were! It seemed awful easy. I was tipped off by Jim Alexander...I tipped Tom Yingling. The TV wasn't very strong but the FM's were. There's been a lot more Boston and a lot less southern trope this year. I hope the Perseids yield a few ch 3 & 6 loggings when the locals go off. 73"

Clinton T. Day 22 Cross Street Westerly, Rhode Island 02891 (EDST)									
<u>April</u>		21 Tr		0145 WJ2-13 MD		30 Es		2000 unID-3 CTV	
20 Tr		0000 WHP-21 PA		<u>May</u>		<u>June</u>			
		0015 WAPB-22 MD		2 Tr		0015 WAPB-22 MD		6 Es 1930 WCCO-4 MN	
		WBPP-45 MD		30 Es		1700 KTIV-4 IA		18 1930 KTCB-2 MN	
		0130 WWBT-12 VA				1730 KXON-5 SD			

Richard Beckman 2328 Griffith Street Philadelphia, Pennsylvania 19152 (EDT)

June		19 Es		1110		T		3 Es	
2	Es	1643	CJCH-4 NF	1710	WTVJ-4 FL	T		1300	MUF to FM
		1645	unID-2 NF	1752	WTVY-4 AL	T		1330	WMAB-2 MS
		2000	KTEW-2 OK	1806	WDIQ-2 AL			1357	KARK-4 AR
			KTVY-4 OK		WSB-2 GA			1400	KRTS-2 AR
		2002	ICR2-5 CUBA		WBRZ-2 LA		4	1320	KTCB-2 MS
		2020	WTVJ-4 FL		KPRC-2 TX			"Es in all day; quite weak—several from Canada though no IDs. Several TPs noted as well—likely PBS stns"	
		2021	ICR2-4 CUBA		KRTS-2 IL				
		2025	KRTS-2 AR		unID-2				
			WPTV-5 FL		ICR2-2				
		2034	CJCH-4 MS		KRTS-2	T		1847	WDAF-4 MO
		2155	WUPT-5 FL		WESH-2 FL	T	6		KSD-5 MO
3		1814	ICR2-2 CUBA		WTVJ-4				KTVO-3 MO
		1828	WPBT-2 FL		WPTV-5 FL				KQTV-2 MO
		1858	WESH-2 FL		WPBT-2 FL				KRTS-2 AR
4		1745	WPBT-2 FL		WESH-2				KMOI-4 MO
		1800	WTVJ-4 FL		WTVJ-4 FL				KOMO-5 MO
		2038	WESH-2 FL		KRTS-2			1900	KARK-4 AR
		2132	KTCB-2 MN		KRTS-2			1917	WDIQ-2 AL
5		0945	WPBT-2 FL		1919	WPBT-2 FL	7	1645	CKRN-4 PQ
			WTVJ-4 FL		WESH-2 FL				Bouyn
			WPTV-5 FL		WTVJ-4				CKRS2-2 PQ T
		1103	WESH-2 FL		1933	WTVJ-4		1659	CHPD-4 OH
		1245	WMAB-2 MS		1956	ICR2-2 CUBA		1700-1750	"Incred-
			State College		1700	WBAY-2			ible amount of unID
		1638	WBRZ-2 LA		2051	WPBT-2			stns on 2-5; no IDE
		1657	WCCO-4 MN			WESH-2 FL			possible"
		1825	CJCH-4 NF			WTVJ-4			1758 unID-3 CBC
6		1624	"Numerous unIDs ...very intense opening"			WPTV-5			1800 WLBZ-2 MS
			KLJB-4 ND			WKRQ-5 AL			Bangor
			Valley City		2104	unID-2 w/TP			"Incredible sur-
		1800	WNGR-2 TN		2123	KTVI-2 MO	T		prise here with
		1810	WTVY-4 AL	July					taped ID and into
		1815	WTVJ-4 FL	1 Es	1652	ICR2-4			local newscast.
		1830	WJXT-4 FL			ICR2-5 CUBA			Roughly 465 miles"
		1838	WKRQ-5 AL			WPBT-2 FL			1812 CJCH-4 MS
		1900	WESH-2 FL			ICR2-2			1930 CJCH-4 NF
			WPBT-2 FL		1917	KDFW-4 TX			2055 WFT-2 LA
			WTVJ-4 FL			WESH-2 FL			KTIV-4 IA T
			WPTV-5 FL		1928	WTVY-4		2155	WOI-5 IA
8		1721	KRTS-2 AR		1945	WUPT-5 FL			Ames
		1805	KARK-4 AR		1955	WEDU-3 FL			KTCB-2 MS
		1759	WNGR-2 TN		2158	WDIQ-2 AL	9	1648	unID-2
		1918	unID-2 Canada		2202	WMAB-2 MS	12	1736	WPBT-2 FL
		1943	unID-5 "CHWCT?"	2	2314	WBRZ-2 LA			WTVJ-4 FL
		2031	KQTV-2 MO		1558	WPBT-2 FL			ICR2-2 CUBA
		2058	WKRQ-5 AL		1600	WTVJ-4 FL			WSB-2 GA
		2115	KTCB-2 MN		1606	ICR2-2 CUBA		2100	WML-4 LA
9		1930	unID-2			ICR2-4 CUBA			WCCO-4 MN
10		1903	unID-2 in French		1700	WDIQ-2 AL		2200	WBRZ-2 LA
11		1143	unID 2-5		1702	WPTV-5 FL	15 Tr	2126	WFPB-31 MD
		2000	KQTV-2 MO			ICR2-5 CUBA			WHAG-25 MD
12		1200	WCCO-4 MN			WESH-2 FL			"Incredible, snow-
		1836	WBAY-2 WI		1740	WUPT-5 FL			free reception"
		1842	WTVJ-4 WI		1800	WTVY-4 AL		2126	WITN-7 NC T
13		1928	WPBT-2 FL		1829	WKRQ-5 AL			"WTRP-7 WV also a
		1929	ICR2-2 CUBA		1835	WML-4 LA			possibility"
		1930	ICR2-4 CUBA		1853	MUF to FM	16 Es	2128	WESH-2 FL
		1955	ICR2-5 CUBA		1912	WBRZ-2 LA		2133	WEDU-3 FL
			ICR6-3 CUBA		1915	KALB-5 LA		2201	WJXT-4 FL T
			"thru KYW-3"	3	2100	KATC-3 LA		2207	WUPT-5 FL
		2005	WTVJ-4 FL		0957	WPBT-2 FL		2239	WKRQ-5 FL T
14		1747	KCKT-2 KS		1100	WTVJ-4 FL	19	1825	WDIQ-2 AL T
16		1928	WPBT-2 FL			WESH-2 FL			WTVY-4 AL
			WESH-2 FL		1232	WPTV-5 FL		1830	WNGR-2 TN T
			WTVJ-4 FL			WUPT-5 FL	20	1704	WPBT-2 FL
19		1110	WPBT-2 FL		1253	WML-4 LA			WTVJ-4 FL
			WESH-2 FL		1300	WBRZ-2 LA			WESH-2 FL
						WKRQ-5 AL		1730	WPTV-5 FL

## Richard Eckman (continued)

July

22	Es	1827	WESH-2 FL		28	Es	1637	WPTV-5 FL		3	Es	1054	KETS-2 AR	T
		1829	WJXT-4 FL				1642	WESH-2 FL				1730	WUPT-5 FL	
		1853	WRDU-3 FL	T	29		1759	ICR2-2 CUBA				1738	WESH-2 FL	
		1928	WBRZ-2 LA					WCCO-4 MN					WTVY-4 AL	
		1930	WPBT-2 FL					KTCA-2 MN	T			1809	WJXT-4 FL	
23		1024	KETS-2 AR	T	30		1830	CKRN-4 QB					WPTV-5 FL	
			WCBI-4 MS				1555	WBRZ-2 LA				1836	WMT-2 IA	
		1029	WDIQ-2 AL				1745	WTVY-4 AL					WOI-5 IA	
		1059	WESH-2 FL					WDIQ-2 AL					KTIV-4 IA	T
			WBRZ-2 LA					WWRG-5 AL	T				KQTV-2 MO	
		1300	WTVJ-4 FL				1750	ICR2-5 CUBA		4		0956	KQTV-2 MO	
		1405	ICR2-2 CUBA				2150	WWRG-2 TN				1837	WBRZ-2 LA	
24		1118	unID-2		31		1014	KETS-2 AR	T			1856	WNL-4 LA	
25		1747	WBRZ-2 LA					WPBT-2 FL				1900	KETS-2 AR	T
		2059	KQTV-2 MO	T				WTVJ-4 FL					KALB-5 IA	T
		2159	WVAB-2 MS				1100	WESH-2 FL		5		1939	WDIQ-2 AL	
26		1921	WBRZ-2 IL				1157	WJXT-4 FL		12		2256	unID-2	
			Chicago				1210	WTVY-4 AL				1856	KTCA-2 MN	
		1926	WMT-2 IA				1215	WWRG-5 AL	T				KKJB-4 ND	
		1929	KUSD-2 SD				1252	WBRZ-2 LA				1900	WMT-2 IA	
		1935	KTIV-4 IA				1527	WVAB-2 MS				1922	WVAB-2 WI	
			Sioux City				1529	KUSD-2 SD				2100	KQTV-2 MO	
		1936	WOI-5 IA				1538	KQTV-2 MO						
		1940-2130	"Midwest				1602	WDAF-4 MO						
			Es remained in--				1623	WMT-2 IA						
			sometimes intense"				1657	KTIV-4 IA						
		2128	KCMB-5 MO	T				KKON-5 SD						
			KSNB-4 NE	T				Mitchell				0800	WRDU-28 NC	
27		1643	WPBT-2 FL				1740	WOI-5 IA					Durham	330
			WTVJ-4 FL				1800	KSNB-4 NE					WVEC-13 VA	230
		1822	WDIQ-2 AL					Superior				0831	WOL-25 SC	
			WORT-4 MS				1830	KNOP-2 NE					Columbia	520
		1840	KALB-5 LA					North Platte					WRLK-35 SC	
		1844	WSB-2 GA										Columbia	520
		1845	WBRZ-2 LA										WVOK-19 SC	
		1850	WVAB-2 MS	T									Columbia	520
		1900	WSJK-2 TN										WCVB-23 VA	210
			Sneedville										WCVN-57 VA	
		1952	WNL-4 LA										Richmond	210
		2230	WESH-2 FL										WHR-15 VA	230
28		1637	WPBT-2 FL										"Patchy fog through-	
			WTVJ-4 FL										out morning--Wash-	
													ington U's (20&26)	
													in snow-free"	

\*June wasn't half bad for E-skip though work five days a week cut into DX a lot more than last year at this time. Quite a number of new stations on Es received...July was a good month for E-skip although nothing truly amazing was noted with the exception of some very short skip on the 7th. There was quite an Es drought during the middle of the month, though the end of the month exhibited the best skip for me, at least. August was a pretty mediocre month as far as Es reception was concerned--at least when I was able to view it. After looking all month for some decent tropo activity it finally came this morning, 9/1. Considering the antenna I have--one of those all channel jobs with no rotor pointing roughly SSW--I was pretty amazed at what tropo can really do. There was patchy dense fog most of the morning with stations from as far as SC in on UHF. I assume this is what's termed 'coastal' tropo. Unfortunately--it's back to college on 9/3 and probably the end of TV DX until Thanksgiving break. 73"

Dean R. Markosha 10636 Avenue "B" Chicago, Illinois 60617 (GDT)

Equipment: 19" Sony Trinitron Plus color set, RCA 4B069 antenna, Winegard U-995 antenna, Blonder-Tongue Able U-2 UHF amplifier, CDE AR-44 rotor at 40'

September

5	Tr	2100	WBAU-13 WI		6	Tr	1817	WOI-5 IA		8	Tr	1545	WGTU-29 MI	
		2200	WGRM-10 IL				1830	KDIN-11 IA				1930	WFRN-7 MI	
		2215	KTTC-10 MN				1842	KCCY-8 IA				2000	WJON-20 MI	
6		0530	KCRG-9 IA		7		1800	KDUB-40 IA				2004	WIPB-49 IN	
		1700	WHO-13 IA				2200	KTIE-21 IA				2006	WBGU-57 OH	
		1800	KIIN-12 IA				2230	KWWL-7 IA				2018	WCET-48 OH	
							2246	WMT-2 IA						

Present log total: 155





# QSL CORNER

Thomas J. Vinding, Jr.  
274 Pineood Road  
Baltimore, MD 21202  
Phone 1-301-272-5669  
Deadline: 19th

- AR KASU 91.9 Jonesboro, Drawer B888, State University, 72467. Letter from Richard Carvell, Mgr. Zank
- FL WBBH 105.1 Orlando, 222 Hazard St, 32504. Friendly letter in 3 days, Don Anolin, CE, Swartz.
- GA WLJZ 96.3 Albany. Letter from Fred (Doc) Suttles, Station Mgr verifies after sending a fresh report this year, & mentions also being heard in Wisconsin. Elving
- KS KCKN 94.1 Kansas City, P.O. Box 1165. Letter from Jim Jett, CE. Zank & also Simon
- KLQQ 106.1 Lyons, Box 768, 67554. Letter from John Gloss, Mgr. Zank
- KMBR 99.7 Shawnee Mission, 4935 Belinder Rd, 66205. "Reception confirmed" note on my report. Signed by Ellis --- (unreadable), eng supt. in 5 days. Simon
- MA WBUR 90.9 Boston, Boston University, 630 Commonwealth Ave, 02215. Returned my report with "above report verified" written at bottom signed by James H. Bonny, CE in 10 days. Simon
- MO KUMR 88.5 Univ. of MO-Rolla, G-6 Library, Rolla, 65401. Letter from Jeffrey R. Stoll, Chief Engineer. Zank
- KSMU 91.1 Springfield, Southwest MO State Univ. 65802. Friendly letter explaining that station heard was not them. Reply in 2 weeks from Gloria Palmer, Eng. Simon
- MN WCCO 102.9 Minneapolis, 215 S. 11th St, 55403. Note & business card from Tim Prouty, Engr. Sup. Zank
- NE KTCH 104.9 Wayne, box 484. Letter from Theodore S. Storck, Mgr. Zank
- NV RNJO 92.5 Rochester, 829 Midtown Tower. Letter from Robert G. Mallery, CE. Zank
- NJ WPAT 93.1 Paterson, 1396 Broad St. Clifton, 07013. Form am/fm letter with out dates, etc. signed Kenneth W. Strout, CE. Simon
- OH WUHE 92.5 Toledo, 4665 W. Bancroft St, 43615. Friendly letter stating they were on a 250 AAT tower after regular antenna was hit by lightning 6-30. Charles A. Myers, operations manager & reply in 10 days. Simon
- WDRN 106.9 Marion, Box 518, 44302. Station info & note of 'most distant reception' but no dates. Signed by F. J. Peters, VP for Eng & reply in 5 days. Simon
- WBEA 107.3 Elyria, EST Building, 44035. Long personal letter chiding me for not reporting more details. Signed Glenn P. Smith, CE in 5 days. Simon
- WVVO 93.7 Rt Vernon, 43050. Unsigned memo from Don Talbot in 2 weeks. Simon
- OK KEDC 94.7 Oklahoma City, 226 SW 31st St. 73109. Letter & map, bumper-sticker from Randall C. Mullinax, CE in 10 days. Lowery.
- SD KESD 89.3 Brookings, South Dakota State Univ, 57006. Letter from Brian Proux, Program Coordinator (the names they dig up for PD, HII) Mentioned also received a report from Louisiana. Also send 2 program guides, one contained an article on FM antennas. Aden
- KELO 92.5 Sioux Falls. Send card signed by Craig ? L. Gundersen ? Basic details. Received 7-12-77 for 6-28 report. Aden
- TX WETS 89.5 Johnson City, Box 21400-A. Letter from Richard F. Ellis, Mgr. Zank
- KUTX 97.5 Waco, Box 7528, 76710. Xerox of my report with confirmation note from Jensen Dove, CE in 5 days. Simon
- KFPT 90.1 Houston, 419 Lovett Blvd, 77006. Letter & KFPT's news paper from Frank Martin CE in 1 month with return postage. Nice letter & said we've only had one other reception report from Quebec? Traska
- KNTU 88.5 Denton, 76203. Nonspecific friendly letter from Guy B. Johnson, Program Dir with reply in 2 weeks. Simon
- UT KSUR 92.5 Cedar City. Short, inspecific letter from Donald E. Cartwright, Mgr along with some brochures on the area. Elving
- KALL 94.1 Salt Lake City. Rex L. Vance, CE sends qsl card with am crossed out & a listing of their translators; mentions their SCA for subaudible telemetry 20-30hz modulation has been heard in Louisiana. Elving.
- VA WKVI 101.7 Kilmarnock, Dean Loudy, mgr sends friendly letter & mao. Elving.
- WY KFBC 97.9 Cheyenne. My first qsl from Wyoming, letter from Ron Kercher, PR. Elving.

Reporters this time are: Neil G. Zank of Lincoln, NE, Shel Swartz of West Palm Beach, FL along with Ken Simon, Bruce Elving, of Duluth, MN, Greg Lowery of Cadwell, GA, Frank Aden of Sand, OR, & Paul Traska of Buffalo, NY. This was all FM QSL Month & I got lots more just waiting to get typed up. If you don't see your report here, either it will be in next month or you didn't send a report yet. Newest reporters are Zank, Lowery & Traska. It looks like the skip maybe gone for a while & qsl's are not back to their reporters yet. Just send in the good news when you get it. 73's for now, and thanks for the support with my column. *Tom*



# Memorabilia

October 1977



Robert J. Williams  
251 6th Avenue East  
Twin Falls, Idaho 83301  
Phone: (208) 733-3621  
Deadline: 10th of month

## "THIS IS YOUR DX"

Featured: Paul Traska

My start as a DXer came to be quite by accident, the year 1967, the month November, the exact date not known, but somewhere in mid-November. I was watching Johnny Carson that night. I don't want to put in a plug for the show, but, back in those days, that show was OK; now---ahh. Well, the show ended at approximately 1:00am. It was a few minutes after, by the time I want to shut off the set. This is not a plug, either: my local channel 2 WGR had already signed off (I wish it would do so now). There was a weak signal coming through. I attentatively kept on looking at it. Then, a great idea just struck me: why don't I change the antenna? I did, and it worked; but I couldn't believe that this was Channel 2 Pittsburgh.

I was very much amused by this discovery. I said to myself: Why not wait until Channel 4 (WBEH) signs off? The same thing might occur. I was amazed once more: Channel 4 Pittsburgh came in. I said to myself again that there is something else; but it turned out to be a bummer when I couldn't see Channel 7 Pittsburgh. I sat up until about a little past 2:00am; all I saw was Channel 7 Detroit. (And odd call letters; at first I thought that someone was reciting the alphabet---WXYZ). I was also glad seeing Detroit, but still a little displeased from not receiving Pittsburgh. "Well, I'll call it quits tonight---it's past 2:15am. I'd better hit the hay before somebody asks what I am doing, looking at all the snowy dots and what picture".

In the meantime, I continued operating, and looking at those fuzzy and snowy pictures; all the time I had no knowledge as to where to position my antenna and where any station could be, but I did manage to receive more than a few great signals without the knowhow. It was after I had joined WTFDA that there came a book of North American TV stations. With that book in my hand, I really went to town. So this amazement or astonishment kept me looking, night after night. I received Channel 4, KARK Little Rock (not by akip). It was after 2:20am, it was meteor scatter; I didn't know that at the time. I just kept on watching, until my total stations were somewhere in the 90s. Time went on; I was fascinated with these signal receptions. Then my brother told me that he too did some tuning of the dials in the early 50s. Some of those stations got me more excited; ones that he had seen back then.

One day, I picked up my TV Guide (AUGUST 1969 issue), and inside there was an article ("Tune Your Set Carefully, and You May Even Get Holland") by (guess who, you're absolutely correct) Glenn Hauser; so I read the article twice, then, I wrote a letter to the address shown: WTFDA-Milwaukee then. I received the literature about the WTFDA, joined, and became a member that year.

Before I go on, let me explain: I later found out that there was no Channel 7 in Pittsburgh. Maybe some day in the future they will have; then I'll get it. After looking and reading over this story, I only wish that I would have known about the WTFDA back in '67; there were better opportunities for acquiring more distant signals than now. Considering total TV-FM and CB stations, all this interference is not "healthy" for DXers, especially the latter one. But, at the present, I'm happy with my total stations and my DXing equipment or gear; they could be a little better, but everybody says that. I have one last word: If you're not in the WTFDA, you're not a DXer.

Thank you very much, Paul. I, for one, have thoroughly enjoyed your account of how you became a DXer.---rjw.

73s, gud DX, Bob





**TOUGH  
TO BEAT!**

# WORLDWIDE TV-FM DX ASSOCIATION

**Established 1967**

SERVING THE  
VHF-UHF DX  
ENTHUSIAST



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